AMERICAN AGRICULTURIST,

FOR THE

Farm, Garden, and Household.

"AGRICULTURE IS THE MOST HEALTHFUL, MOST USEFUL, AND MOST NOBLE EMPLOYMENT OF MAN."—WASHINGTON.

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ESTABLISHED IN 1842. Published both in English and German.

$1.00 PER ANNUM, IN ADVANCE. SINGLE NUMBER, 10 CENTS. For Contents, Terms, etc., see page 256.

VOLUME XXI—No. 8. NEW-YORK, AUGUST, 1862. NEW SERIES—No. 187.

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August.

"Thrice happy, he who on the sunless side
Of a romantic mountain, forest-crowned,
Beneath the whole collected shade reclines;
Or in the gelid caverns, woodbine wrought,
And fresh bedewed with ever-spouting streams,
Sits coolly calm, while all the world without,
Unsatisfied and sick, tosses in noon;—
Emblem instructive of the virtuous man,
Who keeps his tempered mind serene and pure,
And every passion aptly harmonized,
Amid a jarring world with vice inflamed."—THOMSON.

These forest-crowned hill-tops and mountains, where it is really cool in these glowing Summer days, are more easily found in the poet's imagination, than in nature. The air is so sweltering that we find it difficult to believe that they exist at all. Clothing is a burden, even the fine linen of snowy whiteness reflecting every ray of the sun. The air has a furnace breath, and makes every living thing swelter. Even the inanimate world cries out under the infliction. The trees stand with drooping leaves in the breathless air, the grass loses its fresh green look, the flowers hang their heads or close their petals, big drops stand on the water pitcher as if uttering its tearful protest against the torrid heat. The very thought of ice sends a thrill through the blood like the rapture of song. We do not doubt that there are cool places in the world, but they are not very easily reached. In the City every thing is baked. Put your hand upon the brick wall, and you can hardly endure the touch. There is hardly a dry thread in your shirt, by the time you are fairly seated in your office. The easiest manual labor is a burden. Mental effort is the very punishment of Sisyphus. Every thought is heavy as a bowlder, and if you attempt to roll it into place, it comes back again with a rebound. You find yourself doubting if your brains are not baked, like every thing around you.

In the country it is not quite so bad, for there is sometimes a breeze there, and dew gathers on the grass at night fall. But in the broad glare of the sun, every thing wilts, and all creatures flee to the shade. Yet this bright sunshine so characteristic of our Summers, and so uncomfortable while it lasts, has its advantages. We would not willingly exchange it for the milder skies of Britain, with her greener fields, and boundless turnip crops. Our sunshine is as golden to the farmer as to the poet's vision. To him it is a real Midas, changing every thing it touches into gold. These few weeks of extreme heat give us many of the advantages of the tropics, without their evils. Our great cereal crop is of southern origin, and is only made a success by the torrid heats of July and August. It luxuriates in the sunshine, when the thermometer points to a hundred, and bears drouth better than any other of our crops. It is often a failure in the northern belt, where it is cultivated, from the want of a single week of hot weather. It may droop at midday, but it grows apace at night, when heat drives sleep from the farmer's pillow. These fierce burning days, then, mean great crops of Indian corn. The bright rays are transmuted into the golden grain, and when sold become the real gold in the farmer's purse. Our country is the Paradise of this plant, and one can hardly comprehend the magnitude of the corn crop. It is easy to write a thousand millions of bushels, but difficult to take in the conception of so vast a bulk. It is nearly a bushel for every inhabitant of the globe, and thirty bushels to every one of our own population. What countless stores of food for man and beast are showered upon us in the sunlight! The crop this year, well sold, would pay the year's expenses for our great war.

These hot days also mean melons, one of Nature's bountiful provisions to slake the thirst of parched lips, and cool the fevered blood. We see them luxuriating in the sands of Long Island and the Jerseys, and even far up the valleys of the Connecticut and the Hudson, as juicy and high flavored as in the Carolinas. In some localities they require a little help from the gardener's art, but in this latitude they are as sure as Indian corn. They are grown very extensively, and could be produced in any quantity were there a market for them. We see them in huge piles on the boats and wharves, and at the green-grocer's. They are sent far inland to the cities and rural villages, wherever the sales will pay. They form a much more healthful dessert than pies and are quite as well relished.

In these tropical days tomatoes are a possibility. They have become a popular dish within the last twenty years, and are now almost as widely known as the cucumber. They propagate themselves even more readily, and flourish as a weed where they have once been introduced, if they are not carefully gathered in the fall. Though not generally relished at first, most people become very fond of them after a short acquaintance, so that they even supplant the cucumber. They are a much more healthful and nutritious dish, and what the doctors lose the people will gain, when it entirely displaces its rival. Though not so great an acquisition as its congener, the potato, it came much more rapidly into general use, and is an article of considerable commercial importance. There is always a large demand for tomatoes in their season, which covers about two months, but which may be almost indefinitely extended by putting up the fruit in cans and jars.

A large part of the favorites of our gardens—corn and tomatoes, squashes and melons, egg plant and okra, peppers and sweet potatoes—are natives of the tropics. They have been introduced among us without any concerted action, and stand upon their own merits. Some of them require a little more skill and care in their cultivation than indigenous plants, but they are likely to grow in popular esteem as horticulture becomes every year more generally appreciated. We have no reason to believe that these plants exhaust the list of garden vegetables from the south that may be acclimated in the north. The happy accidents that have brought these to our notice will gradually introduce others. Every such acquisition is an addition to the comfort of families, and to the national wealth. Health and refinement are both promoted by the variety of food which the family consumes.

Baron Liebig measures the civilization of a people by the quantity of soap they consume. A still better test is the variety of fruits and vegetables they produce in their gardens. The tropical man with his everlasting rice and plantains, and the Esquimaux with their seal and blubber, are rather low types of humanity. Between these extremes we find a greater variety of food and a higher degree of civilization. But this is not purely a matter of climate. Upon the same line of latitude in our country, we find very different tables spread for human repasts, even among farmers. In one home you may find almost every thing that will grow in the climate, taking its turn upon the table in its season. The strawberries come in May and the apples go out with April of the following year, a constant succession of good things, that make the meal hours pleasant reunions of the whole family. In another you shall find the everlasting hog and hominy in some of its forms every day of the year, or potatoes and salt junk the prominent features at dinner for six days in the week. The vegetable garden is regarded as a nuisance and the fruit yard and orchard are unknown. "Familiarity breeds contempt" with things, if not with persons, and the same dish at dinner, after a while makes a family morose, and unsocial. A new dish is a nest of new ideas. A smile lights every countenance and the tongue is unloosed. We forget dog-days in gumbo soup and chicken salad, and other such-like things. And no idea is more erroneous, than that it is wrong to seek after enjoyment in eating. We ought to enjoy our food, and if we cultivate simple tastes, the greater variety we have, the better.

Calendar of Operations for August, 1862.

[A glance over notes like the following will generally call to mind some piece of work that would otherwise be forgotten or neglected. The remarks are more especially adapted to places between 38° to 45°; but will be equally applicable further North and South, by allowing for latitude.]

Farm.

The work for this month, although arduous, is less driving and more diversified than that for the one just closed. Harvesting and haying are nearly completed, and what remains to be done should be urged forward with sufficient promptness to save the loss by shelling which attends harvesting grain that has become too ripe, and the loss to hay by too much drying. This done, the attention may then be profitably occupied until time for Fall sowing, with making improvements, such as draining, getting out muck, repairing buildings, and implements, working roads, etc. Little things postponed in the hurry of harvest, should be attended to at the earliest opportunity. Their increase is liable to equal that of spiders and compound interest. Now is a good time also to look up additions to your stock, if more is wanted, or if there is room for improvement in breed. Judicious investments of this kind are quite sure to pay. Good stock is the best *bank* in which to "deposit" the surplus products of the farm. So if possible keep all your farm will support well.

Barns, granaries, etc., should often be examined to see that air is let in, and rain, dampness, vermin, fowls, etc., kept out. Bear in mind also the preservative properties of paint. See that all store animals may have plenty of light, as well as air. Both are essential to their health.

Butter—See that everything used in butter-making is scrupulously clean. It pays butter-makers to be particular to do all of their work thoroughly and perfectly as possible. Wash out every particle of butter-milk from the butter, if to be kept for any length of time, and keep the butter as cool as circumstances will permit.

Cattle should not be allowed to loose flesh between this and winter. It is cheaper to keep them in flesh now than to regain it in winter. Milch cows especially need generous fare. Give them a dessert from the soiling patch, or of bran and shorts wet up. They will not object to an occasional cabbage, and cabbages are excellent for them and for milk.

Corn will soon furnish a delicious addition to table vegetables in the shape of green corn, which if well cooked and thoroughly masticated is wholesome. If wanted for future use shave from the cob and dry for succotash, etc. (See item in basket.) We have seen whole ears preserved in salt brine which had a very inviting appearance on the early warm days of the following Spring. Keep the weeds out of the corn as you would robbers from your hen-roost, but guard against mutilating and displacing the roots of the corn by deep tillage.

Draining should be attended to now, if needed and practicable. Be content with nothing short of good underdraining, as this will not carry off one of the great elements of the farmer's wealth—manure.

Fallows, or "Summer Fallows" should be looked to. Let them not become nurseries of foul weeds. You can pull by hand one weed now cheaper than you can plow up the hundreds it may produce next year.

Fences are becoming less used, as the laws restraining the ronming at large of stock are improved, perfected, and enforced. But wherever needed, let them be substantially built, and kept in good repair. "Whatever is worth doing at all is worth doing *well*." Do not let them harbor a Pandora's box of weeds.

Gleaning usually pays, but how well of course depends upon the thoroughness of the raking.

Grain, especially that which can not be put under good shelter, should be thrashed at the earliest convenience. Make thorough work of cleaning, whether for seed or market. It is usually better to sell as soon as the market is fairly fixed. Use all that can be turned to account in fattening stock.

Hay—Cut any remaining. Gather coarse wild grasses for bedding for animals. Secure salt marsh hay and sedge, during the low tides of August, and remove to safe quarters. Surround stacks with good fences to keep cattle from wasting.

Horses, repay humane and careful treatment. Give them the luxury of shade and air, when practicable, during the heat of day. Use nets, or try a wash made by steeping walnut leaves, to keep off the tormenting flies. They will enjoy freedom in the pasture, nights.

Insurance—Good insurance companies and lightning rods have saved many a man from sudden destitution. It is usually advisable to invest a percentage judiciously in this direction.

Irrigation—Consider well, and try experiments. The subject is of momentous importance to farmers individually and to the country at large. (See articles on pages 193 and 202, July *Agriculturist*.)

Manures—Purify the atmosphere around house, sheds, barn-yard and barn, by transferring all manures collectable thereabout to the mowing lands, or compost heaps. Gather unripe weeds, refuse straw, etc., to absorb liquid manures in the hog pen and cattle yards, and remove and renew often. The health of your animals and the wealth of your acres will be promoted thereby.

Meadows—Remove bushes, rocks, and other obstructions from mowing lands. Top dress new mown lands with fine compost, to protect the roots from scorching, and quicken the young growth. Keep stock from mowings until the grass is well started, and do not allow it to be eaten off very close.

Millet or Hungarian Grass—Cut before the seed ripens, if intended for hay. Feed sparingly.

Oats—The harvest is at hand. Cure the straw carefully: it is valuable for feeding.

Pastures—Occasionally scatter cattle-droppings with a maul. Allow no weeds to ripen seed. Sow salt about their roots, to attract the cattle and sheep, and prevent the young shoots springing up. Suffer no fields to be fed too closely.

Potatoes—It is claimed that rot may be arrested by promptly removing affected tops or haulm. In place of early harvested potatoes, quick-growing turnips or late cabbages may be grown.

Poultry may be benefitted by gleaning the grain fields after harvest. If confined to the yard, give plenty of water, gravel, lime, and occasionally a little animal food, to stimulate them to lay. Fatten chickens and ducks for market early; it takes less grain in warm weather, and the prices are more remunerative.

Root Crops—Thin out where too thick. Keep the ground light and free from weeds by frequent use of the cultivator and hoe.

Rye—Harvest any remaining. Glean the fields with the horse rake, and thresh out the scatterings for grinding and feeding to hogs. Select the best growth for seed, and thresh with a flail. Rye flour as sponge for bread, rises quicker than wheat flour.

Sheep—Separate rams from the ewes and give the lambs a rich pasture by themselves or with the yearlings. Keep a few older sheep with them as leaders of the flock. Examine the udders of ewes while weaning their lambs, and draw the milk occasionally if necessary to prevent their becoming caked. Salt freely, and apply tar to their noses to repel the fly.

Swine—Keep them growing by liberal feeding. Commence fattening. Early pork is usually in demand, and it costs less to make it. Feed with green food frequently. Unthrashed pea vines are well relished, and are wholesome diet. If corn is fed, try boiling, or at least soaking.

Timber cut at this season is believed to be most durable. Prepare any needed for fencing or building next season. Strip off bark as soon as cut.

Timothy sown late this month, will ordinarily give a good growth next season. If sown with winter grain, leave it until next month or the following Spring. Use from eight to twelve quarts of seed per acre, according to circumstances.

Turnips—Strap leaf, or flat varieties, may be sown, among corn, after early potatoes or on other unoccupied ground. (See article on p. 243.)

Winter Grain—Prepare grounds, to be sown late this, or early next month. It will succeed on sod ground, but preference is generally given to cultivate it after fallow, oats, or an early hoed crop.

Orchard and Nursery.

Sparse crops of fruit in many parts of the country during several years past, had so checked the ardor of enthusiastic fruit-growers that too many of them have neglected the care of old orchards or failed to plant new ones. Those who have given proper attention in these respects, are now fully repaid, and in the abundant crops this year, they feel encouraged to believe that fruit trees may still flourish and bear, and yield, as now, a remunerative harvest.

Gathering the early fruit in the orchard, and budding in the nursery, will be the chief labors of August. The ripening apples and pears must be secured or they are lost. Where a good market is at hand, the fruit should be carefully picked and sold. If there is no market, gather and make into cider, dry or put up in bottles for winter use. In gathering the fruit, great pains should be taken not to injure the trees. Heavy boots are apt to start the bark on the branches, if worn when climbing about in the trees. Thrashing the trees with poles is an abominable practice, beating off the fruit spurs with the fruit. Some of the late fruit trees will need to have their overloaded branches braced or tied up, or what is better, a portion of the fruit removed, that the remainder may be finer, the tree not overtaxed, and the branches saved from splitting down beneath their burdens.

If the trees have not been pruned, they may well receive a trimming now, where it can be done without injury to the fruit. In the nursery the knife may be used to good advantage upon small trees. The work of budding the nursery seedlings should proceed, and it is better to bud than to graft small trees, unless they are allowed to attain a sufficient size to graft in the branches. Most people, however, prefer to buy "grafted trees" as they are called, hence the stocks of one and two years old should be budded this month. See full directions in July *Agriculturist*. Round off any stocks budded last season and not already cut off close to the bud.

If borers have been permitted to hatch out and penetrate the bark of peach, apple or quince trees, they may be found and cut out before they have done much damage. They are still in the bark, or between the bark and new wood, into which they will penetrate, if not disturbed, upon the approach of cold weather. Continue use of the "scale" remedies given last month.

The growth of the present season is now sufficiently mature for layering, or inarching, to increase or change the variety. Peg down and cover with earth the new shoots of propagating stools, and tie the branches of inarched stocks to stakes, or other supports to prevent shaking about by the wind.

If the month proves dry, water must be given to the seed beds, especially those of evergreens which should also be partially shaded from the hot sun. Trees transplanted in the spring may also require an occasional watering, but a good mulch is far better.

The plow, cultivator, or horse-hoe, should be run through the nursery rows frequently, to keep down weeds and lighten the soil. The hand hoe will also be needed to work closely about the trees.

Kitchen and Fruit Garden.

The labors of the judicious gardener are now being rewarded by supplies of various delicious edibles, which may be kept up until Jack Frost locks up the teeming earth for a season of repose and recuperation. The surplus of most kinds may be preserved for winter use. The space from which early peas, potatoes, etc., have been gathered, may be used again this season for quick-growing turnips, late cabbages, spinage, etc.

Asparagus—Keep clear from all weeds, and gather and clean the seed as it ripens, and sow at once if new beds are needed. Time is saved, however, by setting out roots in Autumn.

Beans will soon be ready for table use, and the young pods of bush varieties are excellent for pickling, and may also be kept good for the table by packing in salt. (See article on page 246.) Plant a few for a Winter supply.

Beets—In pulling for use, take them from the thickest parts of the bed, to allow the remainder plenty of space. Keep the ground well loosened and watered, and free from weeds. Mark by small stakes the earliest and best to be saved for seed.

Blackberries—Pick as fast as fully ripened, but be not too hasty, especially with the New-Rochelle, as some time is required to attain its full degree of excellence. Any surplus may be dried, preserved in bottles, as directed on page 215 (July No.), manufactured into wine, or the juice bottled, as directed in last number for currants.

Cabbages, Cauliflowers, and Broccoli—Hoe often, even twice a week is none too often. Set out plants for a late crop, and sow seed for Fall greens, and keeping in cold frames.

Celery—See article on pages 213, July, and 243, this No.

Corn—Keep out all weeds, but do not disturb the roots of the corn. Mark the earliest and most prolific stalks, to be preserved for seed. Examine to prevent depredations of the corn-worm which eats downward from the silk to the kernels.

Cucumbers are now attaining sufficient size for table use and for pickling. The yield will be increased by not allowing them to ripen, also by pinching off the longest runners. Reserve the best for seed, and remove all other buds from vines that are set apart for ripening seed. Ripe cucumbers, properly pickled, are excellent.

Currants and Gooseberries—Prune as soon as the fruit is gathered. Remove from one-third to one-half the old wood, and shape to tree form. (See recipe for bottling currant juice on page 215, July *Agriculturist*.)

Egg Plants—The growth and ripening of fruit will be hastened by placing a board painted white on the north side of the hills. Hoe well; hill slightly.

Espalier Trees—Keep well trained and pinch off superfluous growth.

Grapes should be zealously guarded against insect ene-

mies and mold. Tie the leaders to the trellis. Where the ends of the bearing branches have been pinched off, the side shoots will need to be shortened in.

Herbs—Complete the gathering and drying during the period of blossoming.

Hoe to loosen the surface and to destroy weeds.

Hops—Pick, spread until perfectly dry, and store in bags, or pack in bales.

Lettuce—Sow in vacant corners for Autumn use.

Melons—Remove all fruit, except three or four specimens to each vine; those remaining will be larger and of finer flavor. Place straw, or a board, under those nearly ripe, to protect from worms and rot; occasionally turn them to ripen equally on all sides, but do not injure the stem.

Onions—Gather for use or for market as soon as they ripen, but if to be kept for any length of time, leave them exposed to the sun, until properly cured. Sow for "pips," to be left in the ground during the Winter, for early use next season.

Peas—Most kinds have yielded up their fruit. Clear the ground from straw of early crops and feed it to swine. Fill the vacancy with turnips, or late cabbages, lettuce, onions, etc.

Potatoes—Remove and burn all diseased tops or haulm. Harvest and market early crops, and replant the ground as directed above.

Raspberries—Cut out all except two or three of the strongest young shoots for each root for the crop next year, and keep them properly trained to the stakes or trellis. Hoe in a compost of well-rotted manure and ashes.

Seeds—Save the earliest and best of all kinds. Label each one distinctly with the name, and time of raising; keep in a dry, dark place, secure from vermin.

Spinage—Sow at intervals for Autumn use.

Squshes—Remove eggs of the squash bug (*Coreus tristis*) from leaves, and destroy the insects already hatched out. Save the earliest and best squashes for seed.

Strawberries—Clip the runners of those in hills as they appear. Young vines may be transplanted the latter part of this month. It will pay to do the work carefully, and water as often as needed.

Tomatoes—Continue to trim the vines, and destroy worms by hand picking.

Turnips—See article on page 231.

Weeds—Save quarters by giving weeds no quarter. Cut down expenses by cutting down weeds before they have had time to ripen their seeds. Those whose seeds are nearly ripe, should be burned. Cast others into the compost heap.

Flower Garden and Lawn.

August heat is trying to the less hardy exotics. Great care and judgment are needed to carry them safely through. The great mistake of too frequent sprinklings and too few thorough waterings, is often made. Mulching is usually all that is necessary, but if, upon digging into the soil, it is found dry to the depth of three or four inches, take out earth near the roots, pour in a good supply of lukewarm water, and, when soaked away, return the dry earth. This will prevent surface-baking.

If you have any new plant or flower which you wish to perpetuate, now is a good time to note its peculiarities, and mark, by string or otherwise, so that the seed may be saved. As fast as those not wanted for seed complete their blooming season, cut them down if perennials, and pull them up if annuals, to give place to others. Late sown plants should be ready to transplant to spaces otherwise vacant during the remainder of the season.

Sweet Williams, carnations, daisies, phloxes, hollyhocks, polyanthus, campanulas, etc., will give bloom next season, if the seed is sown now.

Budding—This is a proper time to bud the rose, but the practice can only be recommended on a smale scale and for amateurs. The buds often die out in a few years. Oranges, lemons, magnolias, and many of the flowering shrubs may also be budded.

Bulbs—Such as the hyacinth and tulip, should be lifted as soon as the leaves turn yellow, the offsetts removed, and the bulbs dried and put away in paper bags until Autumn, then re-planted. This has a tendency to keep them more vigorous and truer to their colors. If necessary to remove them before the foliage is ripened off well, take up a ball of earth with the bulb, and re-set until the foliage is ripened.

Climbers—See that they have suitable supports.

Dahlias—Keep well tied up and prune where growing too thickly. One, or at most two good flower stalks per root is sufficient. A mulch about the roots in dry weather will benefit them. Cut away the dried flowers as fast as they lose their beauty. Watch for and destroy insects, especially the greyish worm which bores into the stalk and feeds upon its juices.

Fuchsias may now be propagated by cuttings and layers. Their continued bloom places them among the finest gems of the flower garden.

Hedges should receive their final Summer clipping during this month. Cut from the top. If cut late in the growing season, the new growth will not sufficiently mature before Winter.

Hoeing should be continued whenever needed.

Houses—If any are to be built this season, let the work begin at once. Make needed repairs and alterations in those already built. A cold house for grapes and other hardy plants can be built at a trifling cost—usually a lean-to against some other structure.

Insects—Exterminate in every practicable way. Do not let them increase by a second crop at this season. Even if they have done all their injury for the season, allow none to weave their cocoons for next year.

Layers of many of the woody plants can still be made with a probability of their rooting before Autumn. Use wood of the present season's growth. Shoots laid down in early Spring, if well rooted, may now be severed from the main stock.

Lawn and Grass Edgings—Mow evenly as soon as 6 to 8 inches high. Frequent cutting causes it to thicken at the bottom. A sprinkling of guano water, or liquid manure, after cutting, will cause the grass to start with vigor. New lawns may be sown adding a little Winter wheat, or rye, to protect the roots during the Winter.

Mignonette will still bloom late in the season, if sown at once. It will also form good house-plants for Winter.

Pelargoniums—Start cuttings for a Winter stock to bloom in-doors. Thin out and head back plants to give them a good form.

Potted Plants will need care at this season. Water frequently, and loosen the surface soil, if not mulched, removing weeds and moss. Pot off a good stock of the various plants intended for early Winter flowering.

Pruning should have been mostly completed last month according to directions then given.

Roses—Keep up the war against the slugs. Budding may still be performed on late growing sorts, and layers of new wood pinned down. The remontants should now show a second bloom.

Verbenas—Layer plants for Winter flowering. The past few years have added many new seedlings, some of remarkable beauty, and others quite *fragrant*.

Weeds—Keep from the borders, walks, from growing among the grass upon the lawn, and from every foot of your premises.

Wild Flowers—Some may be found which, by careful cultivation, will prove valuable additions. The peculiarities of soil, shade, moisture, etc., where they grow naturally, should now be noted for future guidance.

Green and Hot-Houses.

Scarcely anything additional need be said with reference to these, as most of the ordinary house plants are now in the open ground. A good supply of potting earth should be prepared, both for present and future use. It is better after having lain in the heap some months, hence a large stock should be provided. A good potting soil is made of 3 parts leaf mold, 1 part loam, 1 part sand, and 1 part old manure.

Houses should be put in readiness to receive tender plants the latter part of next month. It is always better to have all painting done some weeks before plants are brought in.

A good stock of cuttings of various kinds, intended to form late Fall and early Winter flowering plants, should now be put in and properly cared for. A house, or frame is needed to start them well.

Potting should be attended to now, that the plants may be ready for an early Winter bloom.

Apiary in August.

Prepared by M. Quinby—by request.

In sections where the crop of buckwheat is raised, bees will begin to store honey from it in the surplus boxes, from the 1st to the 10th of this month. All boxes containing the white honey, must now be removed, if it is wished to keep it pure. A box may be nearly full of clover honey, and a few ounces of buckwheat outside, or next the glass will make it appear as if it was all that quality. Four pounds of one quality, is worth as much in market, as six of the other, hence the advantage of keeping it separate. Where there is no buckwheat, there will be nothing further added to their stores—except, perhaps, on the western prairies; and all surplus boxes may be removed now. All cells not sealed up, will be likely to be emptied soon. Full boxes certainly should be taken off, as the honey grows darker when left on. Do not put on glass boxes now unless there is a fair prospect of their being needed. A weak colony would be likely to do nothing more than soil the glass with propolis, and make it look bad for another year.

Continue the use of the sweetened water, and other means to destroy moths and worms. Keep all dust and filth swept out clean from under small colonies. Weak swarms in the movable comb hive may be much benefitted by giving them a comb or two filled with sealed brood from a strong colony. The brood hatches in a few days, adding greatly to their numbers. New colonies that were formed by simply dividing the combs, as mentioned in Apiary in June, should now be examined, and if the division without a queen was strong enough to construct combs, while rearing one, they would make all store or drone comb, which is unprofitable for rearing brood. Remove such combs now, replacing with empty frames, that worker combs may be constructed instead. The honey so stored is best quality, almost equal to that in the surplus boxes and may be used for the table, or it may be put away to assist some light colony through the winter.

Exhibition Tables at the Office of the American Agriculturist.—The following articles have been presented since last report:

FRUITS, ETC.—*Strawberries*—White Strawberries, (very fine), from Robert Benner, New-York....Triomphe de Gand, (very fine), from A. Child, Newmarket....Triomphe de Gand and British Queen, from F. A. Wilkisson, 208 West Washington Market, N. Y., and grown by Mr. Knox, Pittsburg....Great Austin, from W. S. Carpenter, 329 Greenwich-st., N.Y....Russell's Prolific—a new seedling—from Geo. Clapp, Auburn, N. Y....White Alpine Strawberry—seedling—from W. S. Carpenter, Rye, N.Y. ....Cutter's Seedling and Triomphe de Gand, (both been in bearing six weeks), from E. & G. Marshall, Poughkeepsie, N. Y....*Cherries*—Triumph of Cumberland and Reine Hortense, (fine), from David Miller, jr., Carlisle, Penn....*Currants*—La Versailles Red, and Red Cherry, from E. S. Woolsey, Milton, N. Y....White, (very full branch), from G. Smith, Morrisania, N. Y....Red Dutch, (2 years old cuttings), and Black Naples, (both very fine), from Mrs. E. C. Wheeler, Fairmount, N. J....Red Cherry, Red Dutch, White Transparent, White Provence, (very fine), White Dutch, White Clinton and White Grape, from W. S. Carpenter, Rye, N. Y....Red Dutch, (very fine), and Black, from W. F. Heins, Woodstock, N. Y....*Raspberries*—Doolittle, Black Cap, Brinckle's Orange, and Anges Fillbasket, from W. S. Carpenter, Rye, N. Y....Imperiale, (fine), and Hornette, (both new), from E. & G. Marshall, Poughkeepsie, N. Y....*Gooseberries*—From Mrs. Hall, Williamsburg, L. I....From Mr. England, Bushwick, L. I....From E. & G. Marshall, Poughkeepsie, N. Y....*Mulberries*—Everbearing and 2 other varieties, from Mr. Tuttle, New-Haven, Conn....*Apples*—Roxbury Russet, from Henry Day, English Neighborhood, N. J.

FLOWERS, ETC.—Cut flowers, from A. S. Fuller, Brooklyn, L. I....Fuchsias and Nasturtiums in pots, and cut Flowers, from Mrs. O. Judd, Flushing, L. I....Cut Roses—Reine Hortense—from W. A. Burgess, Glen Cove, L. I. ....Cut Blooms of Magnolia macrophylla and Thompsoniana, (very fine), from Parsons & Co., Flushing, L. I. ....Gloxiana in pots, (very fine), from A. Bridgman, 876 Broadway, N. Y....Cut Flowers from Jacob Braun, Williamsburg, L. I....Cut Flowers and Bouquet, from Prince & Co., Flushing, L. I....Cut Roses, Heliotrope, Honeysuckles, etc., from Wm. A. Burgess, Glen Cove, L. I....Arum dracunculus and Dragon Flowers, from H. T. Haviland, Brooklyn, N. Y....Marchantia polymorpha, from P. V. Leroy, N. Y....Cut Roses from A. Cummings, Esq., N. Y....Cut Flowers of Cimicifuga racemosa and Pyrola elliptica, from Mrs. E. C. Wheeler, Fairmount, N. J.

VEGETABLES, SEEDS, ETC.—New Potatoes grown without tops, from T. W. Field, Brooklyn, L. I....29 Potatoes, crop of a three-eyed piece of Early Sovereign Potato, planted April 8, 1862, from Wm. F. Heins, Woodstock, N. Y....Wild Mexican Potato, planted April 10, 1862, and taken up June 27, 1862, and Kidney Beans, from G. M. Usher, Port Richmond, Staten Island, N. Y.... Heads of Timothy 11 inches long, grown on reclaimed swamp, from T. Hale, Wales, N. Y.

IMPLEMENTS, ETC.—Model of Dikeman's Patent Corn Marker, from Dikeman & Hewlett, Hempstead, L. I.

MISCELLANEOUS.—Trophies from Secessia, viz: 25c. Shinplaster, Bone Ring, Musket, Trumpet, and Gloves—from 1st Regt. N. C. Cavalry, per Mr. Sharp, New-York. ....Very small Hen's Egg, from Mr. Nostrand, Flushing, L. I....Large Dorking Egg from Rev. J. Weaver, Fordham, N. Y....Very small Bantam Eggs, from Robert Thompson, Weeksville, L. I....*Wine*—Sorghum, (fine), from Rev. A. Myers, Springfield, O....Currant Wine, J. C. F. Rommel, N. J....Clothes Washer, W. M. Doty.

Containing a great variety of Items, including many good Hints and Suggestions which we give in small type and condensed form for want of space elsewhere.

State and County Fairs—Our List.—On page 256 will be found a list of *all* the State and County fairs of which we have any knowledge. We have been very diligent in watching the papers for reports of meetings, appointments of fairs, etc., and both in this way and through our correspondents we have only learned of those there given. May we not appeal to our readers, especially to such as are interested in Agricultural Societies, to furnish us the information at once, by marked papers, premium lists, or letters, telling the time and place of holding any County or State Fair which is not recorded in the list?

Royal Agricultural Show a Pecuniary Failure—Rain and Crops in England.—Mr. Judd writes in a postscript to a letter dated London, July 5th, that "the experiment of holding the Great Annual Exhibition of the Royal Agricultural Society, in London, at a time when there were so many other attractions, proved a failure pecuniarily, though very fine as a show. The total receipts amounted to £12,000 ($60,000), but this was from $15,000 to $20,000 below the expenses. The *weather* here is still very rainy—it pours down every other day, and drizzles during parts of the intervening days. It would hardly seem possible that the hay crop should be gathered in even tolerable condition, or that the wheat crop should make any progress. Considerable fears are expressed here as to the prospects. We can not rejoice at the losses of our friends elsewhere, even though it may benefit us; but perhaps Providence may compel jealous foreigners to aid us in bearing part of our expenses, by compelling them to purchase our grain crops....."

The Homestead Law.—The following letter from Speaker Grow, interpreting this law for a Kansas subscriber, will explain itself:

SPEAKER'S ROOM, June 20, '62.

Dear Sir.—No one person can take, under the Homestead Act, over a quarter section, and that he can take without any reference to how much land he owns, if he occupies and cultivates as required by law. But if he lives on less than a quarter section, he can take adjoining, provided that (which) he takes with what he has shall not exceed a quarter section. Your owning land in Kansas does not prevent your *settling on and cultivating* either an adjoining quarter section, or any other elsewhere.

Yours truly, G. A. GROW.

Settlements under the Homestead Act.—"J. C.," "H. W.," Melrose, will see by referring to our last issue that we advise the formation of companies, say fifty families or more, in making new settlements. This plants all the institutions of civilization in the wilderness at once. Get up such a company or join one already formed, if you move at all.

The Agriculturist and the Ladies.—"G. E.," Pa., says, a wife in his neighborhood threatened to leave her husband, because he talked of dropping the *Agriculturist*. He does not say how far from him that wife lived, but we have a right to guess. "Served him right." What sensible woman could be expected to keep house without our hints on household matters, floriculture, and our recipes?

Strawberry Exhibition—Explanatory Remarks of the Committee.—Our last number was a little delayed, and we were enabled to insert the *Awards* made by the Committee of Judges on the Strawberry Exhibition, reported upon more fully on pages 240 and 241, but we had no space for other remarks, which we here give. The hints will be of value to Societies offering prizes for similar exhibitions:

"The Committee appointed to examine the Strawberries exhibited at the office of the *American Agriculturist*, offer a few explanatory remarks. They have selected the Triomphe de Gand, as the best for general cultivation, and by this they mean the best for market. The best berry for market is the one which, for the time being, will net the greatest profit per acre, under good cultivation. This distinction the Committee believe, belongs at present to the Triomphe de Gand. But there is another prize offered for the best market berry. Now in the Committee's view, this prize also belongs to the Triomphe de Gand; but, being requested to do so, they have selected another popular kind, the Wilson's Seedling, but would state that they deem it in quality quite inferior to the Triomphe de Gand; it is, however, large, firm, very productive, and sells for a good price.

"The Committee would suggest, that on future occasions the list be headed with a prize for the best berry, quality alone to determine. A prize might also be offered for the best berry for the garden, and another for the best for the field, retaining the excellent feature of the present list, of a prize for the best dish of the leading kinds, which should come in, however, before the prizes for collections, so that the judges may select the best, whether in a collection or not, and avoid the anomaly of giving a first prize to a second class dish, as has happened on the present occasion. The Committee can not close without congratulating the Proprietor upon the good management and entire success of the exhibition, and expressing a hope that these exhibitions may be often repeated."

Poisoned Sheep.—"M. W.," East Taunton, Mass., says he has used butter forced down the throat with entire success for thirty years. The sheep are probably poisoned with laurel, though he does not say so. The oils are effectual remedies for some kinds of poison. It is safer to extirpate the laurel.

The Rose Slug.—Whale oil soap, four lbs. to the barrel of water, applied with a syringe, is the best remedy we know of.

Butcher's Offal for Hens.—Nothing better to start laying. But it is almost certain to give the eggs a bad flavor, which, however, only persons of delicate taste will notice.

Butter from Scalded Cream.—"J. C. R.," Pittsfield, Ohio, has tried the method recommended in a former article with entire success. The method is, to put the cream into a dish set in a kettle of hot water.

Sour Milk and Preparation of Meal for Calves.—In answer to "S. T. L.," Dwight, Ill., we quote from Allen's book on "Domestic Animals:" "The milk should not stand more than half a day before feeding to young calves. As they advance in age, it may be fed rather older, but should never be allowed to become sour; nor should it ever be fed cold." Sour milk is neither natural nor wholesome for calves. To prepare meal for them, scald it, and add a small proportion of flax seed. Wheat bran or oat meal, with a little salt, added together with fine hay, is good food for calves after weaning, if pasturage is short.

Choked Cattle.—"J. E. W.," of N. J., says "seize hold of the tongue of the animal and give it two or three jerks, harder or lighter according to the age of the animal." Sometimes simply rubbing and squeezing, with a firm pressure, the outside, will remove the obstacle.

Some Dogs.—A farmer's daughter puts in a demurrer against our sweeping condemnation of dogs—because her dogs churn. For five years they have done the churning in a large dairy, saving a great deal of hard labor to the women of the household. Now this is sensible, and we glory in the dogs that work—and still more in the women that know how to get service out of them. We have never supposed that the Almighty made a mistake in creating dogs. They have their uses like other animals. A horse is excellent in the stable, but a poor parlor companion. A goat is very good cropping scrub oaks, blackberries, and brier roses, but we should not like him in the orchard, under the table, on the sofa, or in bed with the children. It is your sleek, useless parlor dogs, that we object to. A dog at a churn or grindstone, or what is better, under a garbage cart helping his master, we glory in. No more useless curs. "Your work, Mr. Cur, or your neck," should be the motto.

Dry Hay for Cows in Summer.—Cows sometimes get a surfeit of grass, especially in wet, warm weather, when the grass is succulent and rank. This feed distends the bowels uncomfortably. An armful of dry hay once a day, will serve to absorb some of this moisture, and benefit the cow in several respects.

Poultry in Indiana.—"C. G. E." Poultry can be sent to the N. Y. market in the winter season from points near railroads at a profit, if nicely fattened.

"The Market Book."—Mr. Thomas F. DeVoe, Butcher, in Jefferson Market, and member of the N. Y. Historical Society, appears as the author of a historical work of very great value. The first volume is a history of the public markets of New-York, with sketches of many of the principal butchers, from the earliest time down to some now living. Statements and descriptions are introduced, interspersed with anecdotes, so that one gains a very clear idea of the habits of the people, the laws of the city and the location of the markets; and in whatever has any connection with the sale of human food, the book is particularly full and clear. The history of public buildings, streets, squares, ferries, of the origin of now prominent and wealthy families, of the Revolutionary war, and of important civil and military events as successively they had a bearing on the craft, give to the work ever-varying interest. We have perused it with very great pleasure and instruction, and find everywhere evidence of great discrimination and accuracy. It has especial interest to the agriculturist, because not only the first introduction of neat cattle and small cattle into New Netherlands, is recorded, but changes in the character of market stock are noted, as well as record made of the most notable animals; and in a subsequent volume, in which histories of the markets of other cities also will be given, Mr. DeVoe purposes to discuss the ways in which various kinds of meat, and other produce, are brought to market, and to describe every article of food sold in the public market, the manner of its production and how it is prepared for sale. We are impatient for the second volume. The price of Vol. I, (large 8vo., 621 pages, and beautifully printed) is $2.50.

The Wheat Aphis.—Last year, at the East particularly, the Aphides, or plant lice, were very numerous on various kinds of grain, on cherry trees, etc. This year, while this continues in a less degree at the East, the West has been alarmed over large sections by the prevalence of the aphis in the wheat heads to an extraordinary extent. We have received 15 or 20 letters containing specimens of wheat heads thus affected. Some of the letters contained also other little, rough, dark colored insects with light bands, which we recognize as those devourers of plant lice, commonly called tigers. There is little to fear from the aphides, except when in immense numbers, at which times they greatly reduce the strength of the plant, and the grain does not fill. The damage done is not ordinarily perceived before thrashing, when the grain will be found lighter. We know of no cure, or defense against them. As they increase, their destroyers—lady-bugs, tigers, and certain flies also—multiply, and will keep them in check.

Insects on Gooseberries.—"J. H. D.," Kansas. The insects described are probably red spiders.

The Bureau of Agriculture.—Isaac Newton, of Pennsylvania, Commissioner, and Richard C. McCormick, of New-York, Chief Clerk. This is the state of the case. It is our duty to our readers to announce the fact. We wish to say nothing more on the subject at present.

Parson Brownlow's Book is a narrative of personal experiences in East Tennessee, during the eventful year just past, with much collateral history and exceedingly interesting. 458 pages, 12 mo. Published by G. W. Childs, Philadelphia. Price $1.25.

A Pamphlet on Bee-Keeping, by Martin Metcalf, contains many valuable hints, some new ideas, and elucidates his method, and patent hive. 96 pages, 12 mo., for sale by Saxton, New-York.

Disease of Watermelon Vines.—"F. C. A." Windham, O. We have no acquaintance with the white worm which seems to be the cause of the disease. The tow around the vine would be more likely to be effective if it were watered with liquid manure every day. Bugs seldom get the start of thrifty plants. Possibly a change of spot for planting the melons would remedy the difficulty.

Pine Leaves a Mulch for Strawberries.—"J. W. H.," N. H. We have no experience with this kind of mulch, but see no objection. Two inches in thickness, or even less, will be enough.

Russell's Seedling Strawberry.—Mr. George Clapp, of Auburn, N. Y., made a beautiful exhibition of this new, large, and finely flavored seedling, at the office of the *American Agriculturist*, on June 28. The berries were seen by most of our prominent pomologists, and many others, and universally admired. The berry is very large, scarlet, of fine flavor, excellent quality, apt to be hollow cored, said to be very prolific, pistillate. See advertisement.

Triomphe de Gand Strawberry.—"W. S.," Bordentown, N. J., thinks this the best of thirty varieties he has tried. His neighbors are digging up other varieties and planting with this.

Lychee Nuts.—A new nut, or fruit, from China has recently appeared in our market, called Lychee. It is the fruit of the *Nephelium litchi*, and consists of a pulpy fruit surrounding a large hard seed, the whole en-

closed in a soft shell, consisting of numerous angular plates like the scales of an alligator, on a small scale. The pulp though dried considerably is very delicious.

Variety in Fruit-Growing is a matter of vital importance. Strawberries, perhaps, pay as well as any thing else, but the season only lasts three or four weeks. The same labor could be employed in picking raspberries, currants and blackberries, which come along in succession for two months after, when the Fall fruits are ready. Any one fruit is liable to fail, and a variety divides the risk. A fruit-grower who has a variety will ordinarily succeed better than one who makes a specialty of the strawberry. Of the latter fruit the Wilson's Albany, and Triomphe de Gand, are among the best well-tested varieties.

Strawberry Culture.—"E. B.," Poughkeepsie. The more thorough the preparation the better. Turn in the clover immediately. Use the subsoil plow, if the land is at all heavy. Manure after subsoiling, harrowing or plowing it in three or four inches deep. If the runners have been struck in thumb pots you may look for quite a large crop next year.

Profits of Fruit Growing.—"G. W. C.," Wings Station, asks what kind of fruit is most profitable, and what net profit fruits have been known to yield? It is difficult to give a precise answer to these questions. A gentleman in Delaware expects to get this season a crop of 50,000 bushels of peaches from about 120 acres. If he gets two dollars a basket his crop is worth 120,000 dollars, or a thousand dollars to the acre. As much as this is sometimes realized from fruit. But the next 3 years the same trees may yield nothing. In cultivating the small-fruits, from two to four hundred dollars an acre are not uncommon results.

Renewal of Strawberries.—"W. H. W.," Canada East. Strawberry beds will last a great many years, but most fruit-growers find it safest to renew after two full crops. The increased productiveness of the beds pays, and the ground is easier kept clean.

Cranberries from Seed.—"A. T.," Iowa. The objection to producing plants in this way is the long time it takes to get them into bearing. They will grow from seed in any moist loamy soil, but a plantation can be had much sooner from vines transplanted with care.

Cranberries on High Ground.—"E. P. T.," Me. We have seen them growing in such localities, but consider it doubtful whether any will do as well there as on wet land.

The White Doyenne Pear is the old Virgalieu, which has generally failed at the East, except on the quince stock. The farther a pear or other fruit tree is removed from its wild state, the fewer thorns or other appearances of a native condition are seen. Hence a grafted tree has no thorns or spurs, while an ungrafted tree often shows them.

Catawba and Lenoir Grapes.—"F. B.," Wis. We have never heard of the Catawba turning black. The Lenoir is of nearly the same color with the Herbemont, dark-blue or violet, and for some time was thought to be identical with it.

Delaware Grape in Maine.—"E. P. T.," of Lewiston, Me., says this grape matured perfectly in open-air culture at that place.

Sweet-Sour Apples.—"J. E. Y.," Ohio, asks if there are apples sweet upon one side, and sour upon the other. We have eaten such apples. They are a sport of Nature, and not the result of any direct effort on the part of the cultivator to produce them. We have eaten splendid Northern Spy's grown upon the sunny side of the tree, and insipid specimens grown in the shade. The red cheek of an apple we think is of higher flavor than the other, which the sun has not kissed. In the sweet-sour apples, the sun has carried the joke a little further, and turned all the acids upon one side into sweets. Such trees are valuable only as curiosities.

Apples Preserved by Salt.—"G. L. W.," Kings Co., recommends packing apples in barrels that have contained salt, to preserve them. We want at least several experiments before we can indorse it.

Hardy Apples for Minnesota.—"J. O. E.," Goodhue Center, Minn. Apples from Canada and Northern New-England, will probably suit your climate. Fameuse, Baldwin, Roxbury Russet, R. I. Greening, are very hardy. It is quite possible that seedlings raised there will prove more hardy than any thing from abroad. The experiment should be tried. The location for an orchard or nursery should be well sheltered from prevailing winds by a belt of evergreens, if possible. Shelter alone will make a difference in climate of three or four degrees of latitude. The cutting back in August is a good plan, but a well drained soil is better, to ripen the wood.

Northern Spy.—"T. W.," of Canastota, says he has fifty trees of this apple set twelve years. In 1849 he had three or four bushels, in 1860 sixty bushels. He has kept the ground cultivated all the while with corn and potatoes, until last year when he seeded down. He says the trees need a good deal of thinning and high culture.

Plum Stock for the Peach.—"J. B.," of Richview, Ill. In England the plum stock is universally used for the peach. It is thought to make the tree more hardy, and to give it a dwarfish habit. If the wild plum is a free grower, peach orchards would probably do well upon it. We have never seen the experiment tried, but should have no doubt of its success in skillful hands.

Tar on Fruit Trees.—F. A. Jones, Ohio. If the tar was applied directly, it will be likely to kill them. Young fruit-growers frequently "get bit" in this way. The tar should be applied to a strip of stout canvas before it is put around the tree. The only remedy is to scrape off the tar if the trees are not already dead.

Budding the Peach.—"S.," Bradford Co., Pa. Any of our articles on budding in back numbers will convey the desired information. Single buds or eyes are the leaf buds. Any one who has ever noticed a shoot of new wood can detect the difference between a blossom and a leaf bud in a moment. The process of budding is so simple, that a child can perform it, after a little practice. See full explanation in July number.

Angers Quince.—"A. B.," Ill. This quince is cultivated principally for dwarfing pears. The fruit is not desirable.

Shortening-in Evergreens.—"G. W. C.," Wings Station. This will thicken the foliage to any desired extent. The Arbor Vitæ, Norway and White Spruces, bear the shears well. They can be trained to a perfect cone, or sheared into a hedge of almost any form.

Pruning Evergreens.—"H. D. C.," Florence, Mass. The best time is while they are making wood or just before. Hedges are usually clipped in May. The spruces we have shortened-in, in June. They should be pruned in the shape of a true cone, the longest limbs at the bottom. Each tier of branches should be shorter than the one below. If you shorten above it forces growth below. An evergreen stripped of its lower limbs is a deformity. Better cut it down and start a new one.

Soil for Nursery.—"Z. J.," Wis. Any good loam suitable for corn will make good land to grow young trees on. We have seen fine evergreens growing on reclaimed swamp. The soil should be well drained. Dry apple seed should be soaked in water before planting.

Hedge Plants for Gardens.—"H. A. B. C.," Kansas. A good hedge will of course take up some land, but it will make what remains very much more valuable for all garden crops. An evergreen hedge breaks off winter winds and enables us to cultivate fruits and flowering shrubs that would perish without their protection. The Osage Orange will probably do well in Kansas. We should prefer two-year-old plants, but would use four-year-old, if younger were not to be had.

Norway Spruce for Shelter.—H. Grundy, Ill. It will be much cheaper to purchase the plants than to try to raise them from seed. It requires considerable skill to get the plants through the first season, and special conveniences which only nurserymen have. The growth is slow at first, but rapid after the fourth or fifth year. Plants from one to two feet high are the most desirable for setting—those thick and bushy at the bottom. Small trees can be had for four or five dollars a thousand, but if time is any object with the cultivator it is better to buy a little larger and pay more. Not a root should be suffered to get dry in transplanting.

Early Sowing of Oats.—"J. L.," Pa., claims as results of this practice, stiffer straw, a larger yield, and heavier grain. He is quite right.

Hop Culture.—"L. M. M.," Port Covington. In the Summer of 1857, we visited the hop-growing districts in Otsego County, and gave a full description of the methods of culture and curing adopted there, for which see *Agriculturist*, August and September 1857. The practice of suspending wires from large border poles, and substituting strings for hop poles was then coming into use The expense of furnishing a yard with poles was estimated at about two hundred dollars per acre. It was claimed for the wires that they were cheaper, and the cords saved much labor in handling poles. The hop-growing interest is very limited in comparison with other agricultural products, but shall receive its due share of attention.

Wheat in Utah.—"T. B.," of Great Salt Lake City, says ninety bushels of White Taos wheat were grown on a city lot, one and one quarter acres, a rich black loam, irrigated three times. Another man in Cache Valley raised 71¼ bushels on one and one quarter acres. Seventy two bushels of wheat to the acre makes a "great country."

Sorghum in Minnesota.—A subscriber writes that eighteen gallons of syrup were made from cane grown on nine square rods in Morrison County.

Chess Again.—"J. A.," Ashtabula Co., O., says, he is in for the premium, and now knows just how to get it. He tried last season, but somehow, what he took for *chess* stalks, bore *wheat* heads, and concludes he did not sow in the right phase of the moon. He is now carefully watching the moon, and is so positive of it next year, that he wants the "shiners" kept for him, unless we will send him a few in advance.—Can't do it, friend Josiah, but will keep our bank account ready, to draw out that amount at any time.—Ed.

How many Pounds of Corn to the Bushel?—"J. S.," Tyre, N. Y. Previous to 1857 the standard weight of corn was fifty six pounds to the bushel. Two pounds were added by the legislature of that year which operates unfairly upon eastern farmers as their corn weighs more per bushel than the corn of the west which constitutes the great bulk of what is in the market. But the speculators not satisfied with this, demand, in some places, sixty pounds to the bushel, which is a still further shave upon the farmer's profits. Farmers should have conventions to protect their own interests and refuse to sell except at the standard weight.

Pedigree Wheat.—"J. F. H.," Lancaster, Pa., thinks this wheat very fine, a single head measuring 7 inches. It is very productive and later than the common wheat. Any notes throwing new light on the cultivation of farm crops will be acceptable.

Ground Bone Heating.—"T. L. H.," Wilkesbarre. Heating to the utmost, we should think, would release ammonia. Any strong acid would decompose the bone, and lime would increase the heat. We think if the ground bone were well dried before it was packed in barrels it would not heat. If the bone had any thing mixed with it, it would be difficult to fix the price.

Sumach Tannery Refuse.—"D. W. R.," Greenville, Ct. It will probably answer for mulching as well as other vegetable matter, and can not be worth much for manure, until it is composted. We should be glad to hear of experiments with it.

Liquid Manure vs. Muck.—"T. G. S.," West Brattleboro, Vt. It takes off the profits to cart muck two miles. The objection to carting the urine to the field is that it will not be done often enough to save its most valuable constituents. The moment the muck absorbs it, it is safe. If it lies fermenting in the vault a week or two, especially in warm weather, much of the ammonia escapes. If a cistern be attempted we should make a large one, mix water with the urine and apply it with a watering cart to grass and other growing crops.

Good Squash Seed.—L. L. Knox, Wis. The seed should be taken from a well ripened squash, should be well dried, and kept in a dry place.

Asparagus Bed.—Z. Cooke, Wis. If we could have the handling of the roots we should prefer the three-year-old roots to the seed. It takes three years to get a good bed from seed. If the old roots are not badly mutilated they would yield some cuttings the first season, and plentifully the second. Two-year-old roots are best.

Cauliflowers—Making them Head.—"A constant Reader" transplants them into the cellar in good soil in the beginning of winter. With an occasional watering they head finely.

Lilliputian Top-Onion.—"J. W. B.," Macedon, O., claims for this onion, that it is milder than any other, more uniform in size, more sure than the common seed. One pound contains about 8000 miniature

onions, and may be sown by hand or drill. These are important items, if further cultivation proves them true.

French Tree Tomato is a novelty yet, not thoroughly tested; but from last year's experience, we do not want it. It is not *tree* enough to stand alone.

Cotton in Kansas.—"G. L.," Snobny Hill, Kansas. The sample of cotton sent us is a very fair article, of "medium" grade, worth to-day 44 cents per lb. There can be no doubt that this staple can be grown several degrees further north, with profit at the present prices. Kansas is a good field for the experiment.

Preparing Chickory for Use.—"S. N. Y." Dig the roots with a potato fork, in the Fall, before hard freezing; wash and scrape them, and split the larger roots lengthwise, and cut into pieces 3 inches long. Dry in a slow oven or heated room until there is no moisture, avoiding scorching. Pack in bags and hang in a dry room until wanted for use, when the roots are cut into smaller pieces and roasted and ground like other coffee. Mix 1 part of the chickory with 3 parts pure coffee. We do not advise its general use, however.

Great Crops of Potatoes.—S. J. Wells communicates to the Country Gentleman the result of experiments with one half bushel each of five varieties of Mr. Goodrich's seedling potatoes raised in Onondaga Co., N. Y. They were planted on a rich loam of clay and gravel, with no manure, though the land was heavily dressed for tobacco two years previous. The tubers were cut into pieces of 2 and 3 eyes each, and dropped in drills 1½ feet apart in the row, the 22d of April. Some varieties occupied more ground than others, owing to a larger number of eyes. When dug they were perfectly sound, with the exception of a few of the "Copper Mine." The following results were obtained:

Copper Mine.....	22	bush.	at rate of	594	bush.	per acre.
Cuzco.....	20	do	do	560	do	do
Pink Rusty Coat.	17½	do	do	475	do	do
New Kidney.....	15	do	do	400	do	do
Garnet Chili.....	14	do	do	378	do	do

Mangel Wurtzel Seed to the Acre.—"D. G. E.," Ill. The rule is four pounds of beet seed to the acre. We generally use a little more, preferring to have a surplus of plants.

Carrots as a Field Crop.—"R. H. S.," Pa. The seed is drilled in rows thirteen inches apart, if you use hand cultivation; thirty inches, if you use horse. The roots are stored without washing. Clean cultivation and manure are the secrets of success.

Potato Nomenclature.—"W. B.," Kansas. This comes appropriately under the work of Horticultural Societies. The names of most varieties are pretty well fixed in the East, and we are making progress in this matter every year.

Digging Machines.—The purchaser of the O'Reilley Terracultor invention, a large sized specimen of which machine was exhibited some time since at Rochester, Mr. H. C. Hepburn, of this City, has constructed one on that principle, but on a smaller scale than the one then exhibited, calculated for a single pair of horses. Its teeth penetrate the earth to the depth of eight inches, and cut about twenty to twenty-two inches in width, leaving at least the surface in a light and finely pulverized condition; but it is yet evidently too hard of draft for two horses. Some changes will have to be made, we judge, to render the draft of the machine comfortable work for one span.

Recently another implement of this character, Comstock & Glidden's Rotary Digger, from Milwaukee, has been exhibited in operation in this vicinity. We saw it dig up heavy stubble ground to the depth of about eight inches and nearly three feet in width; its draft, also proved much too severe for one span of horses. The structure of this machine differs considerably from the other, and its effect on the soil differs also, in that it lifts the subsoil more, but does not leave the surface so finely pulverized. From what we have seen we are entirely satisfied that this method of tilling the soil may be made feasible and economical. Neither of these machines is perfect by any means, but a great advance has been made. We regard them with great favor and shall watch with interest their further development, but as yet would not like to express a decided preference between them.

The effect of Tillage on the Moisture of Soils.—"A. S. D.," Ohio, asks if new land will not make better pasture than that which has been plowed, and if it will not stand drouth better? There is a manifest reason why both these questions should be answered in the negative, even if we had no facts to sustain it. New land or virgin soil so far as it is richer, will, of course, bear more grass than soil often plowed and cropped. But if the soil were equally good, we have no doubt that the plowed land would bear the most grass. Plowing loosens and deepens the soil, and of course gives a deeper pasture ground to the roots of grasses. This loosening of the soil gives freer access to the air, which imparts moisture and guards against drouth.

Horse-Hoes.—"S. H. B.," Newtown, Conn. Shares' Patent is one of the best. They are generally lighter than the cultivators, and work admirably in smooth land. The agricultural stores at Hartford, New-Haven, or at Bridgeport, will probably furnish them.

Angle Worms.—Mr. L. R. Murray, of Jefferson Co., N. Y., wants to know if a *very large number* of angle worms in a soil, originally clay, but worked and manured so long as to be tolerably mellow, effect any injury; and if so, what is the remedy? We have never seen any evidence of serious injury effected by them. It is even thought that their presence is advantageous to the soil, by rendering it more porous, and otherwise making it finer and better.

To Prevent Wall Paper from Fading.—A Connecticut subscriber recommends a lump of alum as big as hen's egg dissolved in 6 quarts of paste.

A Short Method with Night Caps.—"H. H. B.," Wis. Aunt Cinda's method is to tie a knot in each of the opposite corners of a handkerchief, about two inches from the end. Put it on the head one knot before, and the other behind, and tie the other two ends under the chin. Look in the glass and keep from laughing if you can. A shorter method still is to put a *not* before the whole kerchief instead of *knot* in the two ends. We eschew night caps and dogs. A clean head makes a clean pillow case. Soap and water at the roots of the hair are better than cotton at the other end. Keep the head cool.

Why Grease Bread Pans?—"Eunice," of Columbia Co., Wis., does not see the utility of the almost universal practice of greasing bread pans before baking. She does not do it. In the multitude of councillors there is wisdom. Who speaks? Many people bake the bread on the oven-bottom, sprinkled with ashes, and some to the ashes, or instead of them, add flour and carraway seeds. Such use no grease.

Rancid Butter is said to be cured by mixing soda with the cake or cookery in which the butter is mixed. We doubt the cure and still more the wholesomeness of the compound. Fresh butter, if you please.

Medicine for Summer Complaint. J. L. Holmes, Bristol Co., Mass., says, steep rhubarb root in water, add molasses, and boil to a syrup. If the patient is weak, add a teaspoonful of brandy to a teaspoonful of syrup, and give a teaspoonful 2 or 3 times a day.

Drying Sweet Corn for Succotash.—"J. F. H.," Lancaster, Pa. We know of no good oven or furnace expressly for this purpose, and one is hardly needed for preparing family supplies. Where a business is made of drying apples and other fruits they have an apparatus expressly for the purpose. For the family a bushel or two may be dried with the common stove without any difficulty. The corn is boiled slightly in its milky state, scraped or cut from the cob, dried a day or two upon sheets in a bright sun, carrying them in at night, and then finished off in a brick or common stove oven. No family should be without a full supply of this article. Succotash once a week is wholesome, economical, and "not bad to take."

Rain in England.—From tables kept in London, England, we find the amount of rain which fell in 1861 was 20.7 inches; the average fall there is 25.4 inches.

Climate of Washington Territory.—J. H. N., a citizen of that region says: "The climate is much milder than in the States. The farmer can work half of the time in the winter season. I have left potatoes in the ground and found them uninjured in the Spring. Cattle need very little foddering in winter. Corn yields about forty bushels to the acre, wheat the same, and potatoes five hundred bushels; other grains in proportion!"

"Electric Weather Glass, or Storm Indicator."—J. S. FISK, Grafton Co., N. H.—Just to test this instrument, advertised by Lee & Co., we obtained one. It is a glass vial attached to a strip of metal, containing camphor dissolved in alcohol and water to saturation, which is sometimes clear and limpid, and sometimes cloudy or in a crystalized state. It is an old philosophical toy, but after long watching we can trace no direct or uniform connection between the condition of the fluid and the subsequent state of the weather.

Plants by Mail.—"H. L. S.," Provo, Utah. Any thing under eight ounces may be sent by mail. This will include all the small fruits, and some of the large ones. The better way probably will be to send to St. Louis, for such plants as can be had there of the nurserymen, and for the rarer plants to some Eastern nurserymen or florists, who have or can procure almost any plant desirable, and can forward it in the best way. The selling of seeds and plants is not our business.

The Word "Balance," in the sense of remainder, is derived from counting-house usages, and is not so strictly incorrect as inelegant.

"The Freedom of the City."—"M. E. M." asks: "What is meant by granting the freedom or liberty of a City to an individual, as an expression of great regard or esteem, by its citizens?".... It means very little in this country, nothing in fact but a compliment. In the olden time it conferred certain valuable privileges and immunities; and making a man a citizen, endowed him with certain profitable rights. It was often granted in order to induce men of reputation in science, letters, or arms, to make the city their residence; and in Europe it is even now so used. Thus, as one of the inducements held out to Baron Liebig, to take up his residence in Munich, "the freedom of the City" was voted him, and we suppose he became for life one of the City corporation.

Snow in Utah.—"T. B.," informs us that the snow in the mountains there was 34 feet deep in April, and men had to go on snow shoes to free telegraph wires.

Silk weed a Substitute for Cotton.—"N. J.," Grand View, Ind. The downy material within the pods of milk-weed or silk-weed has been used for paper making. We do not think cotton is likely to fail, or that the question of substitutes has any practical value.

Cotton from the Balm of Gilead.—"W. A. M.," Pittsburg. It is not a freak of nature, but one of her provisions for scattering the seed. It does not appear until the tree is old enough to bear seed. It would undoubtedly make good paper, and perhaps serve other economical purposes, but at present it would cost more to gather it than it would be worth. It belongs to the genus *Populus*, which also embraces the cotton wood of the western rivers, which is named from the cotton it sheds when the seed is ripe. We do not share the apprehensions of many that the southern supply of cotton is about to fail.

About Cork.—(Inquirer.) It is the outer bark of an evergreen oak, growing chiefly in the countries bordering on the Mediterranean sea. It is sometimes cultivated further north, as a curiosity. When about 15 years old, the bark is cut off in strips; and afterwards crops may be taken off every eight or ten years.

The Aquarial Gardens in Boston,—long famous as a place of public resort, have passed under the management of Mr. P. T. Barnum, who purposes to make them still more interesting and instructive.

Horse-Racing at Fairs.—A good thing to remember. In the case of a suit brought against the Monroe Co., (N. Y.) Agricultural Society, to recover a premium offered for fast horses, which suit was carried to the County Court, it was decided against the plaintiff, on the ground that "all running, trotting, or pacing of horses, for any bet or stakes, in money, goods, or other valuable things, or for any reward to be given the owner or rider, for any animal which shall excel in speed, is racing, and racing is unlawful."

Farmers' Clubs.—"E. A. H." Granby, Conn., wrote thus some time since about the farmers' club in his neighborhood. "We hold fortnightly meetings—by invitation of members, at their residences. We take our wives or daughters with us, spend the evening in discussing some question pertaining to our occupation, previously proposed—the ladies occupying the parlor with the hostess; closing early after partaking of cake, fruits, nuts, etc. We separate with parting salutations, exchanging assurances of being present at the next meeting. Although a scattered community, we collect in goodly numbers every other Wednesday evening, and enjoy a social interchange of views on some important question of agriculture or horticulture, get better acquainted, become more attached to our occupation, and to each other." This is a model club. Farmers, follow on.

Turnips—The Last Chance.

It is one of the excellencies of the turnip, that it is always in order, from May to September. We have sowed turnips as late as the 1st of the latter month, and got well paid for the labor. Any spare patch of ground, where other crops have failed, or have been removed, may be turned to good account by sowing turnip seed. Turnips come in, as a substitute, for many other crops, and a smart farmer may even now make up a deficiency in hay or grain, by the aid of turnips. And it is worthy of notice, that dry Summers, which pinch those crops, are usually followed by wet Autumns, which are very favorable to turnips. There is a special reason for making the most of this crop the present season.

The demand for grain and breadstuffs is likely to be unusually large. Not to speak of the foreign market, there will be a great demand at home. The operations of the war must have diminished the product of grains somewhat in the North, and still more in the South. With all the efforts of the Confederate Government to secure an increased supply of breadstuffs, at home, it is not likely that the South will produce as much grain as usual. Every plantation has felt the excitement of the times, and it is impossible, under such circumstances, to get the usual amount of labor from slaves. Our advancing armies have found destitution in many places, and there is, doubtless, much more that has not been heard of. There can not fail to be a very great demand for provisions in the Southern States, as soon as they are thrown open again to commerce. It becomes us, then, to make the most of the season that is left us, in raising all the turnips we can. The hay crop is short in many parts of the North, and turnips will save hay. They will also save grain in feeding pigs, sheep, horses, and cattle. They will make mutton and wool, beef, and pork.

The White French, and the Sweet German, or Rock Turnip, may be transplanted still. They will grow as readily as cabbage, and make a fine crop. There are yet a hundred days before the frosts will injure them. A little bone-dust, or superphosphate, will give them a start.

For broadcast sowing, in the corn and potato fields, the strap-leaf, cow-horn varieties are excellent. We have grown them at a cost of four cents a bushel, and at this price they are cheap feed for all stock that relish them. Improve all the waste patches in the field and garden with a sprinkling of turnip seed.

Washing Carriages and Wagons.

It is a great annoyance to have a nicely painted carriage scratched by careless or ignorant hands in washing it. Yet how often is this done! A broom and pail of water sometimes constitute the whole equipment; possibly, an old rag is throw in. The broom or rag is wetted, and dashed on the smooth surface of the vehicle, and the scrubbing proceeds, until the mud is washed off, and some of the varnish and paint, beside. Now, the right way of doing this is very simple. First of all, give the mud a thorough soaking with water, when water from a hose can not be used, using a common garden syringe or sprinkling-pot. Soak it again, and not a little of the mud will run off without any rubbing. With the surface thoroughly saturated, begin with a large sponge full of water, wash gently, depending still more upon the water than the rubbing. A large, soft cloth will answer, if a sponge can not be had. After the mud and grit has all been washed off, give it another sprinkling or two, and after taking off the excess of water with a soft sponge, rub the whole clean and dry with a piece of soft chamois leather. See that this is perfectly free from grit or knotty places. It will remove lint and dust, and leave the varnish clean and brilliant.

Domestic Guano.

It is an old story, we know, but one which will bear repeating, that farmers should take all possible pains to make the best use of their home manures, before buying any foreign fertilizers. Take the single item of hen-dung. It is one of the most powerful fertilizers in the world, for the reason, chiefly, that it contains the liquid and solid excrements together. Prof. Norton says: "It is found to be particularly rich in nitrogen, and also in phosphates. The manure of pigeons, hens, ducks, geese, and turkeys, is very valuable, and should be carefully collected. The amount to be obtained from these sources may be thought so insignificant as to be unworthy of notice; but it must be remembered that three or four hundred pounds of such manure, that has not been exposed to rain or sun, *is worth at least* 14 *to* 18 *loads of ordinary manure.*"

Of course, this dung should not be applied to plants in its crude, concentrated form—it would kill seeds or roots at once. The true way is to place the roosts where the droppings can be gathered up. Then sprinkle the floor beneath with charcoal-dust or gypsum. Where these are not convenient to be had, prepare a heap of dried muck, well pulverized, and spread it under the perches twice a week. Shovel and sweep up the whole mixture once a fortnight, and put the same in barrels. Pursue this plan until near planting time. Then empty your barrels on the barn-floor, and mix the heap with more plaster, ashes, or muck, so that the hen-dung will finally be about half of the mixture. Dampen the compost a little with water, cover the heap with old mats, and let it lie until wanted in the field. Apply it to corn at the rate of a gill to a hill; but be careful to cover it with a little earth before dropping the seed. Use it also at the same rate for potatoes, mixing it a little with the soil at planting. It may also be drilled in with wheat, using it, however, in almost as moderate quantities as guano. If barn-yard manure is also used broadcast, ten bushels of this fertilizer will be abundant for an acre. It would richly pay any farmer or gardener to buy hen-droppings at half a dollar a bushel. Certainly it is unwise to give them away, as some do, to the tanners.

So with other home-made fertilizers. Some sort of absorbent should be kept constantly on hand, and nigh at hand, convenient for use at all seasons of the year. Dried peat or muck, coal-ashes, saw-dust, chip-manure, tan-bark,—all will answer a good purpose. Throw a little, once a week, into the privy-vault. It will keep down all unpleasant odors, save the waste of urine, and make the bulk of material double in quantity and value. When the time comes for the annual cleaning out, Patrick will not make up a wry face, at all at all. Mix the contents with as much more of common soil, and in the course of a few months, we shall have a large pile of excellent, safe and not offensive manure.

Few persons are aware how much can be accomplished in a single year by saving and using the slops of kitchen and chamber. We know of more than one man, who, on hiring a village house and garden, with the soil nearly worn out, has made it quite productive, chiefly by this simple means. One of these pursued the following course: Not being able to buy much manure, he placed a tight barrel near the kitchen door, where it could receive daily offerings from up stairs and down stairs, and weekly gifts from the wash-tub. Every night, in Summer, on returning from his shop, Mr. K. took pail and watering pot, and scattered the rich slops between his rows of cabbages, beets, potatoes, beans, etc. The rains fell often enough to dilute his liquids. In the fall, it appeared that his worn out ground yielded better than that of his fore-handed neighbors.

Our advice would be to dig a pit somewhere in the rear of the dwelling, wall it up with slabs, plank, or brick, and conduct all the slops of the house into it through a drain. Into this reservoir, cast, from week to week, all manner of absorbents. When the pit is filled, it will be worth a good deal of money. But let each man take his own way of economizing. Only, let *some* plan be pursued of saving all the refuse perishable material about a place, and converting it into manure. This is the way to fertilize land, and to feed its occupants.

Tobacco Cultivation—No. VI.

We are forced to be quite brief in our directions for the culture of tobacco. The season has arrived for the most vigilant, watchful care of the Tobacco crop. The leaves are so far matured that the worms, if they have any chance, do great damage before the owner knows it. The tops are running up, and yet are too weak to sustain high winds—as the stalks are brittle.

Topping should proceed at once, or as soon as the plants attain sufficient hight. It is difficult to lay down precise rules for topping tobacco, yet the judgment of the cultivator can hardly lead him far astray. The hight at which the flower stem is broken off depends upon the general vigor of the plant, and the size of the leaves. The size of the leaves rapidly diminishes in the Connecticut seed-leaf variety after the 12th to to the 16th leaf on thrifty plants, and such are usually topped 2, or at most 3, feet from the ground. Plants of less vigor should be topped lower;—the farmer using his judgment as to how many leaves the root will perfect. The later the season, the lower should the plants be topped, as it is the more necessary that the whole energies of the plant should be directed to maturing a few leaves.

Of course, all those various circumstances which affect the growth of tobacco, affect also the hight and time of topping. When this is done, no more leaves grow; but those left, especially the upper ones, feel the influence at once, and grow most rapidly, and if the weather is favorable, very soon ripen. Meanwhile the buds in the axils of the leaves push with almost inconceivable vigor, and must be pinched or broken out as fast as they grow, so that all the sap shall go into the leaves. As they ripen, they become turgid and brittle, with swollen veins and tissues apparently bursting with sap, very different from the soft pliability of a young and growing leaf. Tobacco growers, at the North at least, usually top their plants when the stalks begin to run up rapidly and branch, breaking them off at the 3d or 4th leaf below where it branches. This is about 2½ to 3 feet high. Remember, one frost will probably make a finish of your tobacco, therefore leave no more leaves than will ripen before frost. The leaves are very brittle, except in the heat of the day.

The Agriculturist Crop Reports.

Breadth, Present Condition, and Prospects of the Principal Crops, Gathered from 1,500 Reporters in 24 States and Territories.

Our reports for July 10th, show an exceedingly favorable condition of the crops over the whole country. There will be no failure of any of the small grains, nor does the present prospect indicate any serious falling off in the amount of the corn crop. Of course this crop depends much upon the weather of September, and the holding off of frosts. We have had so much cold weather, and the season was so late, that we have almost a right to expect a late Autumn, and good ripening time for our great cereal.

CORN.—There has been from the first some cause for anxiety in regard to this crop, but the recent hot weather has brought it up very rapidly, and reduced greatly the chances against our having a full crop. There are sections where the last year's crop is still on hand in considerable quantity, and where there has been considerable less planted than usual, but in general, where there has been any diminution in the breadth of corn, the introduction of Sorghum more than makes it good. Upon this crop depends our supplies of *Beef and Pork*, and those of our readers who have expressed their regrets that we have not included these in our statistical tables of crops will see, if they consider, that not only the *price*, but the *quantity* of pork and beef put into market, has a direct relation to the price of corn. This depends upon its abundance and the condition in which it is secured, that is, its fitness for transportation. The number of cattle or swine in any one district at any particular time, has very little to do with the supply or the price, except late in the season, when the corn crop has been chiefly converted into beef and pork, and of course, we except also the prevalence of wide-spread epidemics, which might, and in all probability would, seriously affect the market both for corn and meat.

The Corn crop of the West is represented as just about as promising as usual. In Illinois, Wisconsin, and Michigan, and some other States, there are fears of a short crop, a falling off of 10 to 20 per cent being the estimate; but in Ohio, Indiana, Minnesota, Pennsylvania, and New-England States, on the whole, the appearance indicates a full average or even above, and a little more than the average breadth planted. In New-York and New-Jersey the corn looks poorly, and is estimated at considerably less than average.

WHEAT.—The weather during the wheat harvest in the great Western States, and we may include also the Middle States, has been, up to our last accounts, prevailingly very fine, so that the crop is well secured. Throughout Ohio our reporters seem to be in a real state of ecstacy over the crop, and mark it from 20 to 300 per cent better than common, the average being about 56 per cent for the whole State.

In Indiana farmers seem to entertain very much the same feelings, and the average in this State is about 44 per cent better than common; while in Illinois it is 30 per cent. This, of course, settles the matter with regard to this crop. And although we must say, we think, in the excitement of satisfaction in so good a crop, and such fine weather, several undoubtedly have considerably over-rated the crop, and thus raised the average of our returns, still it may be put down as a considerably larger crop than usual, throughout this wheat-growing region.

SPRING WHEAT has been considerably damaged, and averages a small crop in many localities in Wisconsin, Iowa, and Minnesota, where comparatively little other wheat is grown. In Minnesota the crop is better than in the other States named, and a full crop may be anticipated, if it be well harvested. At present our reports from other districts run fully 15 per cent below a fair average. Still the breadth sown, as compared with last year, will almost, if not quite, make up the deficiency.

RYE.—The crop, so far as reported, and we have full reports of that part of the country where it is most cultivated, is fully up to average.

OATS have been affected by the rust somewhat, and in some sections injured by the aphis. The weather was unfavorable at the time of sowing and in May, which this crop never recovers from. The crop will therefore be light.

HAY AND FORAGE CROPS.—The Hay crop at the West is remarkably good, and well secured. In Pennsylvania it is represented as nearly 20 per cent above average. In New-York, however, it falls nearly as much below, and in the Eastern States about 9 or 10 per cent short of a full crop. The drouth in Northern New-York and New-England has greatly affected this crop. Many of our reporters include Hungarian grass and sowed corn with the hay crop, which is right, as they take the place of it entirely.

BARLEY.—We have reports from Ohio, Wisconsin, Michigan, Pennsylvania, Maine, New-Hampshire, and Vermont, which represent the crop hardly as favorably as last month's report, though, on the whole, better than average.

SORGHUM.—So far as we can now judge of the crops, the prospects are quite as good as usual. The average of the reports puts it about 3 per cent above a full crop. The breadth it will be remembered is two or three times that of any previous year.

FLAX is reported as remarkably good, with greatly increased breadth. The reports we have put it more than 12 per cent *better* than usual, and the amount sown at fully double.

TOBACCO.—We have few reports, but hear no complaints, except that it is a little backward.

BUCKWHEAT.—It is still too early to report much about this crop; we hope for fuller reports next month.

PEAS AND BEANS.—The demand for these for the Army and Navy has induced a much larger breadth to be sowed than common, and except where they have been injured by the drouth in northern New-England, they look very promising, averaging several per cent better than usual.

FRUITS—Still promise well, though many apples have dropped in some sections, still, more than an average crop is left.

Crop Prospects in Europe.

LONDON, *Tuesday, June* 24, 1862.

A question of much interest to farmers and many other classes, both here and in America, is the condition and prospects of the growing crops, especially of the great commercial crop, wheat. I have recently passed through the Northern part of Wales and Ireland, across the Southern part of Scotland, and about 400 miles down through the inland agricultural regions of England. During this trip, every opportunity has been availed of to learn from personal observation, and from constant inquiry of farmers, the condition of the growing crops. During the past week I have also met and conversed with many agriculturists from different parts of the Kingdom, who are drawn here by the great show of the Royal Agricultural Society. The conclusion I draw from all these sources of information is, that a much larger area of wheat was sown last Autumn than usual, at the expense of the usual area of Spring crop. But there is now much anxiety as to the effects of the continued rains. I was prepared to find much more rainy, and damp, foggy weather here than in America, but during two weeks past I have had but few glimpses of the sun, and Sunday last was the only day in which my umbrella has not been used to shed off falling rain. The crops here may have become, in a measure, "acclimated" to this daily shower bath, yet the effect of so much damp weather can not but be detrimental. All are hoping that clear skies will come in time to allow the wheat heads to set and fill out well, yet it is evident that there is much anxiety, and no one claims to hope for more than average yield, notwithstanding the large area sown. The markets are a pretty certain indication of the general feeling and expectation, and, as the commercial reports will inform you, prices of wheat and flour have been advancing here for several days. The recent advices from France and other parts of Europe, and by telegraph up to to-day, report severe rain storms in some places, and drouth in others, with a general expectation of a moderate, if not deficient, yield of wheat. The stock of old grain, at the close of the present year, will of course, be very small. I have therefore, little hesitation in predicting that there will be a continued foreign demand for American breadstuffs after the next harvest here. O. J.

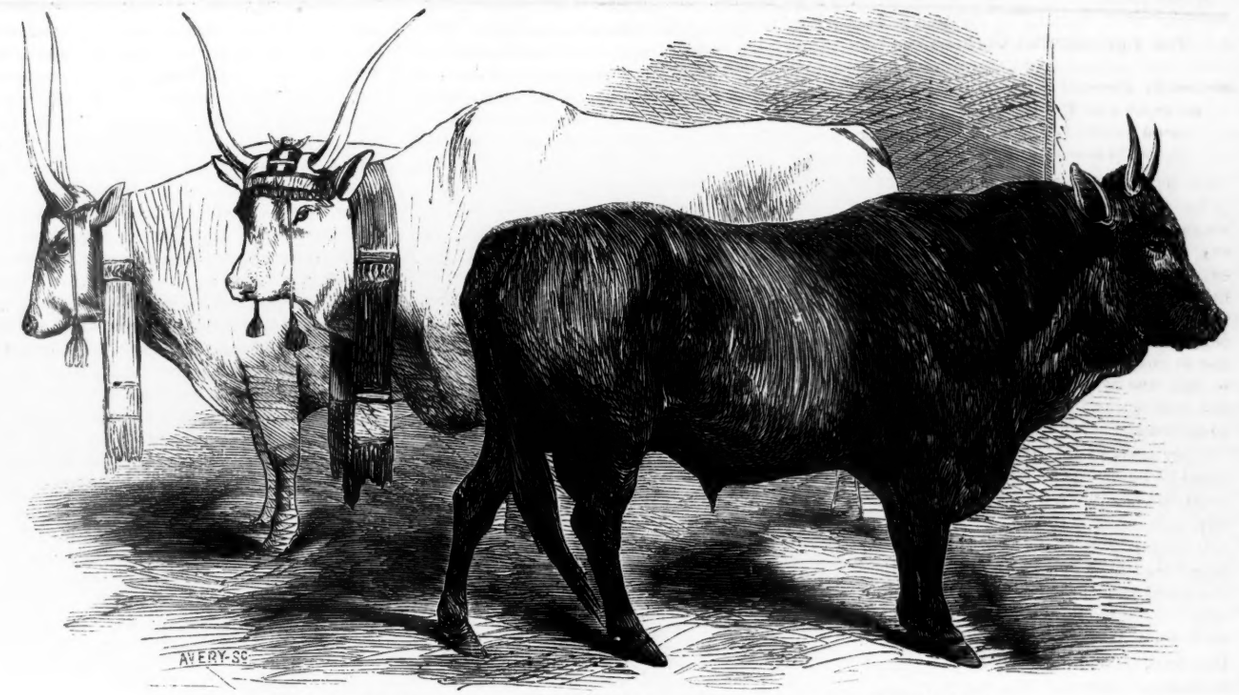
Royal Agricultural Show, etc.

Since the letter from the Editor on page 236 was printed, a note from him has been received, from which we take the following extract. We find room for it here, though it might more appropriately follow the letter referred to, as a postscript: "You will see that no prize is given to the superb Short-horn Bull "*Lord Oxford*," bred by Samuel Thorne of Dutchess County, N. Y., and exhibited here by the Duke of Devonshire. In *my* opinion he is the best animal among all the splendid collection of 250 Short-horns gathered in Battersea Park as competitors for the Royal Society's prizes, and as a set-off to my national partiality, I may add that the same opinion was freely expressed by many good English judges on the fair grounds. Though in flesh enough for the purpose for which he is kept, he is not so fat and sleek as some other bulls in the same class, (those above 3½ years old). Plumpness, i. e. fatness, seems to be one of the requisites to secure success at the English as well as at many American show grounds.

The display of animals is probably the largest and best ever gathered into one place. I send herewith a summary of the entries from Great Britain."

Short-horn Cattle of all classes			250
Devon	do.	do.	66
Hereford	do.	do.	97
Ayrshire	do.	do.	70
Jersey, or Alderney	do.	do.	22
Various other breeds	do.	do.	177
			682
Horses of all kinds			285
Sheep—number of entries of all kinds			642
Pigs	do.	do.	194
			1803
Entries of Stock from the Continent			183
Total entries of all kinds			1986

[Total number of animals shown, about 2,400 or 2,500.]



PISAN BULL AND OXEN OF THE VAL DI CHIANA.

Engraved for the American Agriculturist.

We are in the habit of regarding the existence of certain "points" as essential to the value of domestic animals, according to the uses for which they are bred, whether for labor, food, milk, or wool, etc. The practised eye of a dairyman demands certain points in a dairy cow, and that they are likely to be perpetuated in her calf. The breeders of working cattle seek the development of different points from those sought where beef or milk is the especial desideratum. In England, whence we derive our notions of neat cattle, the most systematic breeding has been pursued with reference to flesh-production, breeding *out* bad points, and perfecting good ones, so far as possible. The Short-horn has been brought very near perfection as a beef animal. The heavy neck and dewlap has disappeared; the hind quarters, especially the loin and rump, have been proportionally increased; and, in fact, the animal which we now consider so nearly perfect is very far from it, if we regard him as God made him—to take care of himself and his herd of cows, to fight their battles, and be the flock leader and master. We give above a striking picture of animals bred with great care, but not for beef. The bull, in the foreground, is of the somewhat noted Pisan breed of Tuscany,—large of stature, heavy and powerful fore quarters; hind quarters showing activity, but lacking beef qualities—evidently a bull to fight, and to work! Two such animals opposing one another would lay out a vast amount of strength, if pushing with locked horns. The whole force of the bull of such a build is concentrated in his forehead. This is most obvious when the attitude, position of head and play of muscles is observed in such an animal in the act of pushing, fighting, or laying out strength in that way. Among that macaroni-eating people, though beef is valued as food, they are content with what nature furnishes, fat in one place, and lean in another—good strong beef; the tender-loin perhaps is all the more valued because there is little of it, and the neck-pieces are probably regarded as so much clear gain over the thin necks of British cattle, while the larger the bones the more soup they will make. Work is what is wanted, and beauty of color—weight of bone, and grace of motion so far as it is not inconsistent with strength, are sought in addition. The result is the production of animals very much of the wild or uncultivated type, as any one will see from the picture. The oxen of South America, Africa, and India, have a similar look. All these wild bovine races tend to great weight in the fore quarters.

The oxen are of the large cream-colored breed of the Val di Chiana, in Tuscany. They are bred with great care, and are of a uniform color throughout, and the breed possesses similar characteristics to those just referred to, heavy fore quarters, deep brisket, full dewlap, light loin, etc. They are very powerful draught animals, fatten rapidly, and the beef is good.

These animals are broken to draw by the head, as the pad across the forehead indicates, and this is indisputably the true way for all neat cattle. The whole shape of the animals shows it; all the muscles of locomotion concentrate their power as it were in a focus at the forehead. To make them draw by the neck is a refined sort of cruelty, to which the poor beasts in this country are thoroughly accustomed, and we have no doubt that nearly half the power of the ox is wasted, as a general rule.

South-Down Sheep.

The sheep is a triple source of profit to the farmer, as mutton, as a wool-producer, and as a manure maker, not to include its value in clearing land of certain weeds and bushes, which are very difficult otherwise to eradicate, which may be fairly reckoned among the profits of sheep-culture. The value of the manure made by sheep depends upon the quality of the food; there is no difference in breeds. There are, however, great differences between breeds in regard to the quality and abundance of the wool, their rapidity of growth, and both the excellence and the quantity of their flesh. We may, therefore, raise sheep chiefly for wool, chiefly for mutton, or for both combined, and it depends upon the markets, the part of the country in which the flock is to be kept, the size of the flock, transportation, and many minor matters, which course is most profitable.

It is not our purpose now to discuss the relative advantages of various breeds, but mention this to show the true position of the South-downs. It is eminently a mutton breed, while the wool product is a source of quite as much profit, at present prices, as that of ordinary fine wool sheep. The South-downs are classified as middle-wool sheep, the fleece being neither coarse nor fine, long nor short, and it is exactly that kind for which there is the greatest present and prospective demand. Relatively the fine wools find a particularly poor market, and within the year they have sold and been used for the same purposes as wools of very much inferior grades. The weight of the fleece of a good South-down is so much greater than that of Merinos or Saxons, that the difference of no more than 10 to 15 cents in the price per pound turns the balance of profit in favor of the lower-priced wool. It is, however, as mutton sheep, in which it has no superior for quality and profit combined, that this beautiful breed has its chief claim to consideration.

The long and careful breeding of JONAS WEBB, of Babraham, England, was attended with such marked success, that it is on all hands acknowledged that he brought the mutton points of the breed very near perfection. Mr. Webb became an old man, his flock was in splendid condition, its reputation could not be higher; he had, besides, become so famous over the whole world, that it was necessary for him to entertain a great deal of company, both friends and entire strangers, and there was no one to whom he could entrust the care of his flock while he, in partial or entire retirement from business, sought that repose which he felt he needed. He therefore

offered his entire flock, except the lambs, for sale, which sale took place on the 10th of July last year, and the lambs were sold on the 20th of June, this year, and thus this worthily famous flock was dispersed.

RAM-LETTING.—The system of ram-letting has been followed with great success in England, offering, as it does, great advantages both to the owner and hirer:—To the owner, because he does not lose the services of rams, whose good points he may wish to perpetuate in his flock, while at the same time he is well paid for their services; to those who hire, because they are thus enabled not only to gain, at reasonable cost, infusion of new blood, but they may select, from among many, those possessing such points as their own flocks may be deficient in, and so, in consecutive years, very greatly improve their flocks in all desirable particulars. This system has never been pursued to any considerable extent in this country, but we are gratified to know that at the approaching sale of rams and ewes advertised by Mr. Taylor, of Holmdel, N. J., this is to be a prominent feature. Mr. T. has a number of rams of such excellent points, and of such noted parentage, that he is unwilling to offer them for sale at present, but proposes to let them for the season.

THE FARM AND FLOCK OF MR. J. C. TAYLOR.

This flock gained a wide celebrity after the Babraham sale, last year, from the fact that Mr. T. became the purchaser of several of the best animals of the herd, and particularly of one, the best ram of Mr. Webb's flock, "No. 89," for which, as we reported at the time, the great price of 260 guineas, or $1,300, was paid. It is well known that Mr. Taylor has for years been the owner of a most excellent flock of South-downs, which, year after year, he has been improving by introducing the best blood of Mr. Webb's flock. His own sales have been quietly made chiefly to California, and distant parts of the country. In fact, up to the time of his own purchase of the $1,300 ram, he had sold one for the highest price that had ever been paid for a sheep, ($1,000). We found his large flock of sheep in most excellent condition, and more than answering our expectations. There are but few which are not of the Webb South-downs, either imported animals, or their descendants, and showing great uniformity in size and general character. The sheep enjoy excellent pastures, good sheds, and careful watching and attention, but there is not the least attempt at show about the flock or the farm.

Holmdel is situated in the county of Monmouth, N. J., in the northern part of the green-sand-marl formation, and this wonderful fertilizer underlies the whole of Mr. Taylor's farm. A stream passing through it, exposes the deep beds on either bank, while a good part of the bed of the stream seems to lie in the same deposit, the very pebbles of the brook being the belemnites and shells of the marl. With this manure always at hand, in condition to be immediately applied, free from weed seed, good for any crop, and requiring no especial care in the application, it is no wonder that this portion of New-Jersey teems with fertility. We must say, however, that it leads people to neglect other manures, and the piles of corn-stalks and other material for composts, unused upon the farms, look badly to the eye schooled to regard this as evidence of negligent farming. There are a good many lambs raised here for the New-York market, and since the introduction of South-downs, and the use of bucks crossed upon common ewes, the lambs are much sought after at high prices. Mr. Taylor's neighbors, however incredulous at first, now unite in placing very high estimation upon this breed, and they would be very loth to part with the use of the rams.

The offer of several of the very choicest of his lambs, to be sold at his approaching sale—one only, which he considers the best, being reserved—is, we are sure, after seeing the stock, *bona-fide;* and we consider it due to our readers to say, that the opportunity is one the like of which has never been offered in this country to obtain sheep of this breed, and indeed better South-downs can not be bought anywhere in the world. Many sheep of Mr. Taylor's own raising are fully equal, and in some cases superior to the imported stock, except in the case of one or two of the Webb bucks, which seem as near perfection as a sheep can come. It is very interesting to compare the present perfection of the South-down with the form considered excellent in animals of this breed a few years ago, to see how the chest is deepened, the girth expanded, the loins widened, the length gained in the rump, the gain in the neck, the breadth of the back, etc. So gratified were we, that we esteem it a privilege to commend this noble breed and Mr. Taylor's sale to the attention of our readers.

"Pleuro-pneumonia," or Lung Murrain in Neat Cattle.

This disease, at present unknown at the West, with us at the East is so far *naturalized* that we believe it may break out in almost any herd situated on any important thoroughfare, or in which there are working cattle which go upon the highway. Still there is as yet but very little of it. The vigorous measures pursued in Massachusetts and other New-England States, to a certain extent checked the evil, and the existence of the disease at other points along the sea-board where ship cows have been bought, though frequently recognized, has not given rise to extensive disaster. We have no doubt the disease may be suppressed, wherever it breaks out, by the perfect isolation of the herd, and the slaughter of every animal of it; not as was done in Massachusetts, killing and burying every animal; but by putting the cattle under treatment until they are cured and fattened, when they may be slaughtered; the flesh will be good food, and the hides good leather, and no danger need be apprehended to other stock, after the barns and stalls have been thoroughly whitewashed and limed, and aired for some time. We saw the disease as it existed in Massachusetts, and were fully convinced of its intensely contagious nature. The fact that of the hundreds of cattle slaughtered in North Brookfield and vicinity, there was not a single case where the contagion could not be traced directly to the imported Dutch cow of Mr. Chenery's herd which arrived sick, is abundant evidence;—that is, directly to that cow through several others by which the disease was conveyed. And again the fact that at a certain house-moving in that town, where 24 yokes of cattle were used in one "string," one pair of these, having contracted the disease from a calf brought from the originally infected herd, though not showing it, still communicated the disease to every one of the 23 other yokes, not a single one of them all being found which did not give evidence of the murrain.

The disease exists in Brooklyn, N. Y., and in New-Jersey, and in some places on the Hudson River where cows from the distillery stables have been taken. Vigorous means need to be taken to control it. The States should act, and so should individuals. It is a great crime to sell an animal supposed to be infected, or to keep such a fact or supposition secret. We need educated veterinarians. A few are in this country; however there are hundreds of quacks to one who knows his business.

In a paper which discussed this subject in "Wilkes' Spirit of the Times," by Louis Brandt, veterinary surgeon, we find the following description, which accords well with our own observation and knowledge of the disease.

SYMPTOMS OF THE DISEASE.

"In localities in which the disease has never existed, veterinary surgeons themselves can be convinced of its presence only by dissection.

"1. The evolution of the disease, in the first period, is so secret and feverless, that only a practised eye can detect its presence. The first observable symptom is, a short, dry, weak cough, or hic-cough, generally without repetition, which, in the beginning, occurs but seldom, and then when the animal rises or is watered, but afterwards more frequently, and accompanied by great pain and effort, a remarkable crooking of the back, a stretching of the head and neck, and a quaking motion of the flanks, the cough becoming more and more hollow and dry; moreover, a slight feverish motion, frequent changes in the temperature of the horns and ears, the muzzle now dry, now moist, bristling of the hair along the back, often a greater sensitiveness when the same is pressed, and sometimes a somewhat excited pulse.

"In this period we find, on *dissection*, firm and incrassated spots of a darker red, and of various sizes upon the generally pale and flabby lungs, and afterwards an effusion of yellow lymph around them in the cellular tissue, lying between the lobes of the lungs. In this period, the disease, when properly treated, is almost always curable.

"2. In the second period, the appearances are: a feverish affliction of the whole body; an accelerated, difficult and unequal breathing, with expanded nostrils, and a violent motion of the flanks; a short, hollow, incomplete, and even suppressed cough; pain on pressing the breast behind the shoulders; continued standing with stretched head and neck, lying down only now and then, and for only a short time, and generally upon the diseased side, with the feet turned under the body, and the head and neck stretched out; reddened mucous membranes; dry muzzle; warm horns and ears; delayed, dry, ball-shaped, painful excrements; entire loss of milk.

"Dissection.—In this developed state of the disease, the affected lung appears hard, firm, enlarged, heavy, can not be inflated, sinks in water, is covered with lymph from one-half to one inch in thickness, and when cut through looks like marble. The pleura and the lungs are covered with false membranes of different thicknesses and different forms, and commonly adhesions between the lungs and the ribs have taken place. In the thorax a discharge of yellowish, cloudy water, intermixed with flakes and strings, is found in various quantities, sometimes a pailful. A suppuration seldom appears, except in case of a previous inflammation of the lungs.

"In the first period, by proper treatment, a cure can be effected with a loss of scarcely five per cent. of deaths, but, in the second, the best surgeon will scarcely succeed in curing five per cent.; whence it follows, that if the owners are unable to cure the disease themselves, they should seek competent assistance in the earliest stages. There is no infectious disease that spreads so easily as this disease of the lungs, so that those who attend to animals thus infected should not go into a healthy stable. The air which remains in the clothes is sufficient, even after an interval of several days, to spread the disease in other stables. Even the surgeon who has been in an infected stable, should not go into a healthy one, without first having himself fumigated with chlorine or tar. Horses are not liable to be infected. It is even advisable, and beneficial to the diseased animals, to put horses in the same stable, for it renders their cure so much the easier."

Breeding and Keeping Swine.

The following article is returned by the Committee to whom it was intrusted to decide upon the merits of the numerous articles received, as, on the whole, the most practical and universally applicable. The kind of swine which Mr. Henry describes is common in many parts of Pennsylvania and New-Jersey, and doubtless is the basis of the Chester County breed, which is now making an effort to become recognized as a regular breed. Whether it is really any better than any well-bred specimens of the Pennsylvania hog, we will not now discuss—but with so good a breed at hand, a farmer may be pardoned for knowing no more about the breed of his own hogs. We may with propriety here add that favorite breeds of swine with us, are the Windsor hogs, bred on Prince Albert's farm in Windsor, and the Suffolk. The former are considered an improvement on the latter, and both, with their crosses, are admirable for young pork. We like the Chester County breed for a large one, very much, but for Eastern farmers, a small, quick-maturing breed for slaughter at 8 or 9 months old, is preferable, and most profitable, for hogs grow very little in the Winter, as a general rule, unless at a very considerable expense in corn. Mr. Henry's plan of feeding his pigs a little grain all the time, so as to keep them in good, rapidly-growing condition, is particularly commendable. Keeping swine on the "root, hog or die" principle until fattening time, and then crowding them by a surfeit of corn, is very poor policy, yet extensively practised. Not less commendable is the boiling the corn, instead of giving the miller one-sixteenth of it for grinding, and then cooking it after all. We have no doubt the boiling answers every purpose. A few hours soaking would save fuel as well as better prepare the corn for digestion. As to marketing—how best to sell pork depends upon the market itself.—ED.

[PRIZE ARTICLE.]

Rearing and Fattening Hogs.

BY GATES HENRY, SCHUYLKILL CO., PA.

The hog is well known all over the world, and is confined to no one part in particular. It belongs to the same class of animals as the elephant and rhinoceros, the thick-skinned, or Pachydermata.

The utility of the hog is in a great measure owing to its very remarkable fecundity, re-producing at one year old, and bearing from eight to ten young at a time (sometimes even more), and that twice a year. Some man-of-figures has estimated the product of a single sow, with only six young at a time, in ten generations, to be about 6,500,000.

The hog was the animal which the Ancients sacrificed to the goddess of the harvest, Ceres.

It has been estimated that there are raised, in the United States, yearly, about forty millions of hogs, which, at $7 per head, amount to the immense sum of two hundred and eighty millions of dollars; if, then, the hog could be so improved as to raise his value one dollar a head, an immense amount of money would accrue to the interest of the farmer. As you say in your prospectus that you wish a farmer's experience with raising the hog, killing, curing, etc., in preference to his acquired knowledge of the brute, I will be candid enough to acknowledge that I do not know the breed of my own swine. They are only of moderate length, with broad, square shoulders and hams, short legs, and great depth, medium-sized heads and straight snouts.

Hardly a day passes that we do not hear the remark, "as dirty as a hog." This, I consider, a vilification of the animal which Franklin's colored servant said was the "only gentleman in England," from the fact that he was the only animal that did not work in that country; I believe that the filthy habits of the hog are in a very great measure owing to his domestication, for in this State he is cribbed up in a small pen, and is fed upon the offal of every thing—upon the most disgusting food—and is considered as much an instrument for converting filth into compost, as a source of wholesome and palatable food. He has the propensity of wallowing in the mire common to all animals of his order, but generally for the purpose of ridding himself of vermin, and of protecting his thinly covered skin from the attacks of insects. In this respect the hog is no more dirty than the elephant or the hippopotamus. No animal displays the changes arising from domestication more than the hog, which may be observed by contrasting the long-legged, wild and savage boar, with the short-shanked, docile, fat and plump Pennsylvania hog, which with difficulty walks rapidly across the confines of his narrow pen.

BREEDING AND REARING.

In selecting my breeding hogs, I always pick out the best shaped, most thriving boar pig to keep over for a breeder. For a sow I select a healthy shoat, well shaped, but thin and lank, in preference to a fat and sleek one; my reasons for this are, that the lean sow will produce more pigs, and raise them better, than one in high order—the sleek one converts all her food into fat and flesh for her own sides and back, while in the lean one it is converted into food for the young. This rule is applicable to all animals. A cow which shows every rib when in milk, will bring forth larger and better calves, and give more and better milk, than the one which always looks fat enough for the slaughter. My experience fully sustains my theory. My mode of raising hogs which are intended to be kept over, is to have them pigged about the latter part of August or first of September, and after allowing them to run with the sow from four to six weeks, confine them in a separate pen. When first taken from the sow they should be fed from six to eight times a day, or else they will fall off in flesh, and it will take them weeks to recruit. Their usual allowance, at first, should be about a pint of milk to each pig, and in order to facilitate the properly attending to them, the milk barrel should be kept standing very near the pen, from which it can be dipped with a pail with very little trouble, being replenished night and morning with fresh skimmed milk from the dairy. The quantity for each pig should be gradually increased each day according to the growth of the pigs, until they have attained to the age of three or four months, when a regular allowance should be made them; and the number of times feeding may be diminished. At this time in the pig's life a little grain fed night and morning, will not be thrown away on him; a little oats or rye if the pig is in a healthy condition, followed by about a pint of corn, which may be subsequently increased to a quart. This addition of grain will tell amazingly in the growth of the animal, as well as have a tendency to keep him in such a condition, that when "fattening time" arrives he will be ready for the knife much sooner than a hog fed only on slops without the daily quota of corn, to say nothing of the saving of a good deal more corn than has been used up to this time in the feeding. The milk from the dairy, when weakened by the slops from the kitchen, should occasionally through the week be enriched by the addition of rye bran.

STY AND BEDDING.

There is no greater mistake made by farmers than allowing swine to run about out of the pen. To say nothing of the immense destruction which they are liable to do, they so completely run themselves down that it takes almost double the amount of feeding to get them in condition for butchering.

The pen in which hogs are kept should consist of two apartments—a covered and an uncovered one. An excellent manner in which to construct a pig-sty, is to erect a two-story frame building, having a part of the under story boarded off for a place in which to keep the slop barrel, reserving the rest for a dry pen for the hogs, and have a pen constructed outside, and communicating with this covered one. The feeding trough should be in the outside pen. In this manner, if the pigs are given a sufficiency of rye straw in the inside pen, and the outside one is kept well supplied with the buts of corn stalks, they will not only make an immense amount of manure, but will keep themselves white and clean, thus refuting the assertion of the filthiness which is continually flung at them. In the upper part of this pen should be kept litter for the bedding for the hogs; or a part of it may be partitioned off for a hennery.

I have adopted what I consider a very good as well as economical plan of getting the upper part of my hog building filled with good littering material. It is this: When hauling in my corn fodder I cut off about two feet of the hard, dry buts, which the cattle can not eat, and have them bound into small bundles and stowed away in the upper portion of the hog-house, to be used as required. These corn buts when thrown into the outside pen are so torn and trampled up that they are converted into good, lasting manure, which has not its superior on the farm, and which would be almost entirely lost if fed to the cattle in the fields, etc.

FATTENING.

When fattening time comes, I generally commence by feeding the "nubbins," and after two or three weeks, follow them up with shelled corn. This I always feed boiled, boiling in the morning what is required during the day, and at night what is necessary for the morning. Feeding thus, brings my work nearly all in daylight. In this way I can make my hogs fat enough for all practical purposes, by feeding them from fifteen to twenty bushels of corn, each, and in slaughtering at sixteen months old, they weigh from four to five hundred pounds. I never like them to exceed the latter figure in weight, for I have no fancy for this overgrown and spongy pork of forced hogs.

HEALTH AND DISEASE.

You will observe that I do not particularize any disease or its remedy—the reason is that I know nothing about disease in hogs. I have never had occasion to know—taking care of my hogs, feeding them regularly and paying attention to their litter and quality of feed. In nine years' experience in hog raising, I have had but one die—and that one I am constrained to think was bodily injured, as he became so weak in the hind-quarters that he was unable to support that portion of his body, and died while in very good condition, showing no symptoms of disease.

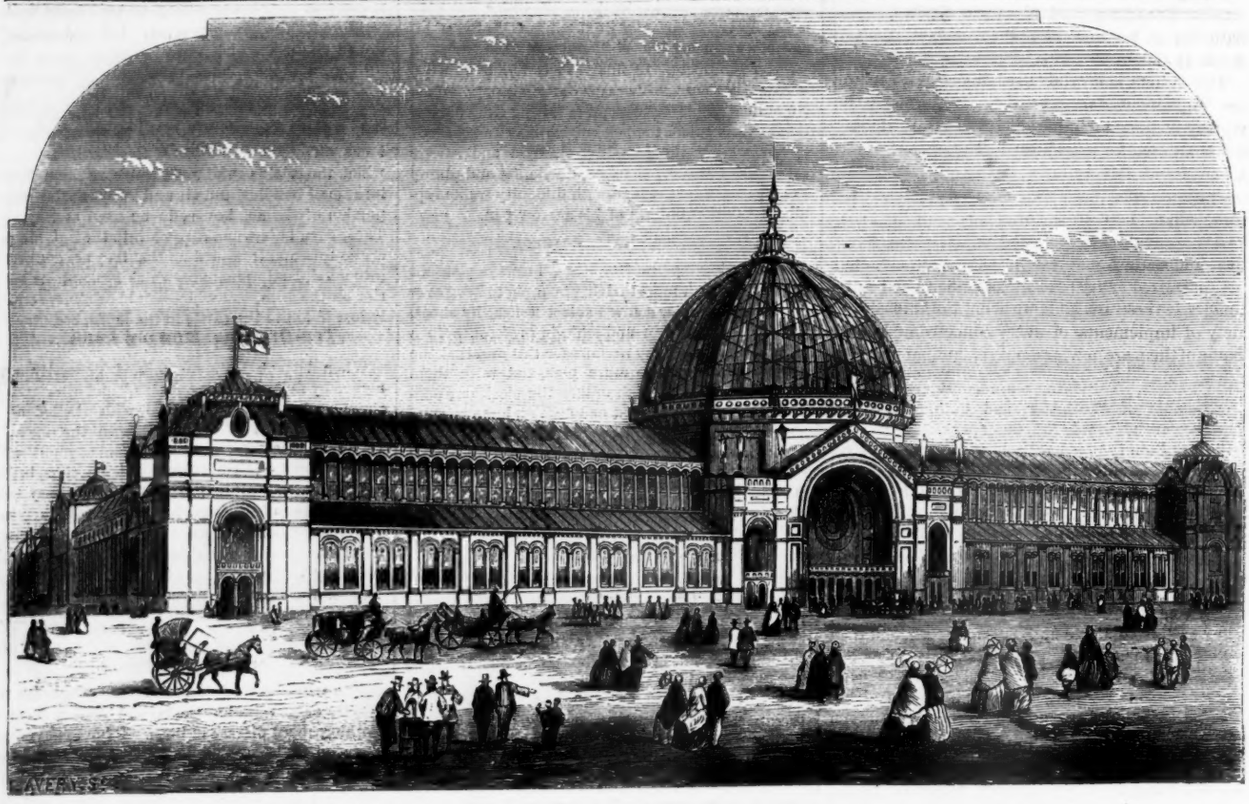
KILLING AND CURING.

As to the killing of hogs, I presume that almost every farmer in the land knows as much as I do; at least, every one should. The butchering is a small matter—the work of a day—and I do not deem it necessary to insert my mode here, as all have nearly the same way of accomplishing this end. The way in which to realize the most money out of the hog meat is to cut every available scrap into sausage meat, and boil the rest into scrapple (curing only the hams), and selling it while fresh, and the sooner the better, as both sausage and scrapple command a higher price early in the winter than at any other season.

The curing of pork is, perhaps, one of the most important matters in connection with the rearing of swine, and my mode I consider as one of the very best, from the fact that it never fails.

After the meat (hams or shoulders) is thoroughly cold, cut and trim the hams very close, then rub them well with salt, pack close in a barrel or tub, and after laying for three or four days, make a brine of the following ingredients: To every 100 pounds of ham, allow 4 gallons of water, 9 pounds of salt, 4 pounds of sugar, 4 ounces saltpeter, and 1 ounce saleratus. The brine should be boiled and the scum taken off; when cold pour it on the meat. From four to six weeks should be allowed, (according to size of hams), for the meat to remain in pickle. After the meat is hung up, allow two or three days to dry, then smoke with as little fire as possible. Use green hickory, with sassafras in small quantities. As soon as the meat is sufficiently smoked, each ham should be taken down and carefully wrapped in paper, then bagged to prevent the depredations of flies, and hung in a cool dry place, out of the reach of rats and mice.

The foregoing embraces only the knowledge, notings, and experience of a practical farmer, about the hog. My object will be attained, if it shall prove to be of any benefit to any one.



INTERNATIONAL EXHIBITION BUILDING OF 1862.

Engraved for the American Agriculturist.

The immense structure in which the World's Fair of 1862 is held, is in South Kensington, London. It is built of brick, iron and glass, and roofed with wood, covered with felt, and furnished with sky-lights. The galleries, as they are called, extend over nearly the whole building, except the nave and transepts and domes. Our view presents the Eastern end; and the Western end is like it, having also just such a dome. These domes are of immense size, larger than the great dome of Saint Peter's church in Rome, being each 160 feet in diameter, and 250 feet high, while St. Peter's is only 130 feet in diameter, and 263 feet high. They are constructed of glass and iron, and must resemble considerably the beautiful dome of the World's Fair building in New-York in 1853. The domes stand nearly 1000 feet apart, and are connected by the *nave* which is like the body of a church, 85 feet wide and 100 feet high, and 1200 feet long. At each extremity the nave is crossed by a *transept* 700 feet long, by 85 feet wide, and 100 feet high, the domes standing at the intersection of the nave and transepts. The long front presented in the engraving is that of the eastern transept. The long southern front on the left of the picture is 1200 feet long, and the entire space between it and the nave is covered; as is also a nearly similar space on the northern side of the nave. The whole area covered is about 15 acres, and the space occupied for exhibition purposes, 1,300,000 feet, exclusive of the temporary building, 800 feet by 200, erected on the northwestern corner for machinery, etc.

It is said there are 600 miles of floor-plank used, partly 6 inches and partly 7 inches wide, and many other curious statements are made. This immense building is well filled in nearly every department, and the managers have been obliged to exclude a vast number of articles, particularly in the British part of the exhibition. Had all the applicants for space from England alone, applying before Dec. 1st, been allowed all the space they wanted, it is said they alone would have required a space nearly three times as large as the entire structure.

The garden and show grounds of the Royal Horticultural Society are directly in the rear of this building on the north. The Show of the Royal Agricultural Society, however, is considerably removed, being at Battersea Park, on the other side of the Thames River.

Editorial Correspondence.

ROYAL AGRICULTURAL SOCIETY'S SHOW—HINTS, ETC.

LONDON, ENG., *Tuesday Evening, June 24, 1862.*

One of the leading attractions which brought me across the Atlantic, and one which has drawn together here a large concourse of agriculturists, not only from all parts of Great Britain, but from the Continent of Europe also, is the great meeting of the "Royal Agricultural Society," held this year in London. In consideration of the fact that the "International Exhibition," or "World's Fair," would concentrate here an unusual number of visitors, the Managers of the Royal Agricultural Society have made strenuous efforts to get up a Show on a scale far surpassing all previous ones in completeness and magnitude. They have succeeded admirably, but I suspect from what I can see thus far, that they are likely to be disappointed in the returns to be received from tickets of admission. It would seem as if one such attraction as the "International Exhibition" really is, would be quite enough in one season, even for the City of London. It is too early yet, however, to judge how far the Agricultural Show will be overshadowed by that of art and manufacture.

I have only time before the closing of the trans-Atlantic mail, to note a few things—those which may afford hints to the managers of our own Agricultural Societies. The present policy of the Royal Society, is to concentrate upon only one Department of industry annually. Thus: (1) one year prizes are offered only for implements for preparing the soil. (2) The next year the prizes are for harvesting implements, (3) and the third year for implements used in preparing the grain for market, and in fitting it for feeding. Last year the first class was on trial. This year the prizes are given only to animals. But though prizes are not offered, all varieties of implements and agricultural products are invited for exhibition. The appearance of the grounds to-day shows that prizes are not needed to call out exhibitors. The entries in the Implement Department alone exceed 5,000! The display is very fine, including every thing that can be used on the farm, in the orchard and garden, and in the farmer's household, from a mousetrap to the ponderous steam plow. The Show grounds cover over 20 well packed acres, about half of which are occupied by covered stalls for farm animals. The latter are separately enclosed, and no one not directly employed about the animals has yet been admitted. I have not myself "professionally" visited this enclosure, and can therefore say nothing of it, beyond the fact that there are, for the animals alone, *twenty five* canvas-roofed rows of sheds, each nearly 500 feet in length, and I learn that they are pretty well filled with animals. The judges, in three sets for each class of animals, have been at work all day, and to-morrow the public are invited in at a pound sterling (about $5) each, to see the animals and hear the awards. The daily admission to the implement yards alone, for all of this week, is 2*s.* 6*d.* (about 62 cents)—a price which, with us, would be considered extravagant for seeing the whole show. Thursday the admission to the whole ground is to be 5*s.* (about $1.25); on Friday and

Saturday 2*s.* 6*d.*, and the first three days of next week 1*s.* (about 25 cents).

The system and order everywhere visible in the implement department is admirable and worthy of general imitation. A separate division is allotted for machinery in motion, and here I find about twenty farm steam engines all in operation. The field trial is twenty miles distant, where there are a dozen steam plows and steam cultivators to be tested on Thursday, Friday, and Saturday. Within the main enclosure are 16 canvas tents, each from 450 to 500 feet long, and these are filled up with an infinite variety of implements of every conceivable kind. Some of them are new, and not yet familiar to American cultivators, but not a few of these implements are the result of Yankee inventions. Every article exhibited is required to have its retail price plainly affixed. The entries were closed nearly two months in advance, which left ample time to arrange each article or group of articles in good order, and in appropriate places. It also allowed the printing of a complete catalogue of every thing exhibited, and its exact place on the ground. This catalogue also contains a brief description of the articles, in from one to twelve (12) lines. Six lines are printed without expense, but each line above six is charged for at the rate of two shillings (½ dollar) per line. The catalogue, though containg 450 pages, is furnished at a shilling. It gives an engraved diagram of the whole exhibition ground, the number of the tent, etc., so that any one having it can go directly to any article he may wish to examine. It will be well for the managers of our exhibitions to adopt a similar method. A book or pamphlet of entries allowing each exhibitor to set forth the peculiar merits of his implements or other products, in a limited space at a specified rate per line, would afford a handsome revenue, and be advantageous to both exhibitors and visitors. I have not time to further describe the agricultural exhibition, which is, beyond comparison, the largest and best arranged agricultural show yet produced. I expect to gather very many hints which will, I trust, be useful to our readers, in the future.

O. J.

Awards at the Royal Agr. Show, (Eng.,) July 2, 1862.

SHORT-HORNS.

I.—Bulls over 3 and under 6 years old: 1st prize, $150, to "Lord Adolphus," sired by Mr. Booth's Cardigan (12,556), dam, Lady Annabella, bred by John Wood, Darlington, Yorkshire.—2d prize, $75, to "Lord of the Harem" (16,430), sire, Duke of Buckingham (14,428), dam, Grand Turk, shown by J. H. Langston, M. P., of Chipping Norton.

II.—Bulls over 2 and under 3 years old: 1st prize, $150 to "Forth," sire, Prince Alfred (13,494), dam, Rowena, shown by Wm. Stirling, M.P., of Kier, Dunblane.—2d prize $75, to "Gamester," (white), sire, Prince Tallyrand (16,765), dam, Griselda, shown by Henry Ambler, of Watkinson Hall, Halifax, Yorkshire.—3d prize, $25, to "Great Seal," (red) sire, Lord Privy Seal (16,444), dam, Jenny Groat, shown by A. J. Balfour of Whittingham.

III.—Bulls over 1 and under 2 years old: 1st prize, $125, to "Whipper-in," (roan), (19,139), sire, Cock of the Walk (15,782), dam, Annie, bred and shown by Stewart Majoribanks, of Waterford, Herts.—2d best, $75, to "Royal Butterfly 10th," sire, Royal Butterfly, dam, Sweetheart.

IV.—Bull calves above 6 and under 12 month's old: 1st prize, $75, to calf shown by Jonas Webb, Babraham.

V.—Cows above 3 years: 1st prize, $100, to R. Booth, North Allerton.—2d prize, $50, to Lady Pigot, New Market.—3d prize, $25, to Jonas Webb, Babraham.

Among the owners of winning animals in other classes of Short-horns are: Duke of Montrose, Glasgow; J. Lane, Cirencester; Lord Feversham, J. Douglass, R. Booth, Lt. Col. Towneley, T. Atherton, R. R. Middleboro, J. Robinson, Lady Pigot. Jonas Webb received a gold medal as the owner of the best male animal among the Short-horns, and R. Booth, North Allerton, the same for the best female animal in the Short-horn classes.

HEREFORDS.

The first prizes in the four classes of bulls go to Hon. Col. Hood of Windsor Park, R. Hill of Shrewsbury, J. Taylor and C. Vevers of Leominster, respectively.

The first prizes in the 4 classes of cows and heifers go to H. Coate of Sherborne, J. M. Read of Cheltenham, Hon. Col. Hood, J. Baldwin of Stratford-on-Avon.

Richard Hill of Shrewsbury, is the recipient of the medal for the best male animal, and H. Coate, of Sherborne, received the medal for the best female.

DEVONS.

First prize for best bull over 3 and under 6 years, was awarded to James Davy of North Molton; do. for best bull over 2 and under 3, to W. Farthing of Bridgewater; do. for best yearling bull, to Hon. Col. Hood of Windsor Park; do. for best bull calf also to Col. Hood; do. for best cow over 3 years, to James Davy of North Molton; do. for best heifer, in milk or in calf, under 3 years, to W. Paull of Piddletown; do. for best yearling heifer, to Jas. Davy of North Molton; do. for best heifer calf from 6 to 12 months old, to J. Davy of North Molton.

Gold medal for best male animal was awarded to Jas. Davy of North Molton; and for best female to the same.

JERSEYS OR ALDERNEYS.—The owners of first prize bulls are D. Smith of Basingstoke, R. Watts of St. Heliers, Jersey; and first prize cows, etc., are owned by F. Newsam, J. P., of Stamford Hill; A. Le Gallais, St. Aubins, Jersey, whose cattle also received one 3d prize, and several high commendations.

AYRSHIRES.—In the four classes of bulls, the first premiums go to the Duke of Hamilton and Brandon, J. Stewart of Strathaven, in 2d and 3d classes, and the Duke of Athole of Dunkeld. The three first premium cows and heifers are owned by the Duke of Hamilton and Brandon, in 1st class, and J. Stewart in 2d and 3d classes.

SHEEP.—Prizes are awarded to three classes of each breed, viz: I. Shearling ram. II. Ram of any other age. III. Five Shearling ewes. The following are the names of the owners of 1st prize animals of some of the breeds most valued in America:

Leicesters.—W. Sandy of Holme Pierrepont sweeps all the prizes given to this breed, except the 2nd in the first class, and takes a gold medal for the best Leicester ram.

Cotswolds.—W. Garne, Bibury; W. Lane, Northleach, in 2d and 3d classes.

South-downs.—Earl of Radnor, Highworth; W. Rigden, Brighton; Sir R. G. Throckmorton, Farringdon.

Cheviots.—T. Brydon, Moffat; W. G. Hunter, Langholme; T. C. Borthwick, Langholme; R. Borland, Closeburn.

Preparing for Wheat.

The time has been when, throughout all the Atlantic States, there was no need of manuring the soil for grain crops. The rich, virgin lands contained all the necessary elements for their growth and maturity. This is true now, to a greater or lesser extent, at the West. But elsewhere it is otherwise. The dung-cart must precede the reaper, or the latter will gather only scanty sheaves. There is little reason to fear that the plants will expend all their force in producing stalks, at the expense of well rounded grain, or that the crop will lodge and mildew. We must make our soils warm and mellow, and get a quick, vigorous growth and early maturity, else the midge will follow hard after the crop and destroy it. From five to ten days in the time of maturing the crop, generally decides whether or no it will become the prey of the midge or rust.

What does science teach us in reference to the needs of our soil? Prof. Norton says: "The grain of wheat contains from 50 to 70 per cent of starch, from 10 to 20 of gluten, and from 3 to 5, of fatty matter." It would seem that wheat contains more nitrogenous substances than any other grain. A careful writer on this subject says: "Up to the formation of the kernels, ordinary soils, with rain, dew and air, can furnish and grow the wheat plant. But when it comes to the fruiting part, the plant has to seek in the soil for materials out of which to fabricate its seed. It is necessary, therefore, that there be in such soil what we farmers call nutritive or putrescent manure—something out of which *nitrogen* can be formed." In barn-yard manure, and other fertilizers of similar character, we find this important element.

Every farmer who intends to sow wheat in the Autumn, should preserve a large lot of his Spring supply of manure to put in with his grain. Increase the pile in every possible way, during the Summer. Compost it with sods, half-rotted leaves, or straw and other litter, and in a few months the heap will have doubled its size and also its value. This stack being worked over will be in a half-decomposed state by sowing time, and thus will be in just the best condition for nourishing the young crop.

The common practice of manuring for corn in the Spring, and then following this with wheat without any more manure, may answer on some strong and rich lands; but otherwise, a fresh and abundant supply should be given before sowing. Some of our sagacious farmers apply a barrel of salt per acre to their wheat lands, a short time before seeding, and find the result every way satisfactory.

That early and hardy varieties of wheat—such as the Mediterranean and Golden Drop—should be chosen for seed, where experience does not assure the success of other kinds; the land well drained, and the sowing done early, are points so manifest they need no urging.

Top-Dressing Mowing Land.

The cutting of grass for hay is an artificial process, and must do more or less damage to the roots. It stops the growth of the plant in its greatest luxuriance, and removes the shade from the roots at the season when they most need it. If the weather is dry they remain exposed to the burning sun for weeks. Timothy, especially, is a long time in sending up new shoots, and is often killed outright by close mowing. The bulbs dry up, and it is quite likely that winter-killing gets the blame for injury done by the scythe in Summer. In pasturing land the grass is removed very gradually, and it is at no time bare. Good land not fed too close, will remain in grass, giving remunerative crops for a century. But mowing lands, as they are generally managed, need to be re-seeded every fourth or fifth year. Where a rotation is followed this may be the wisest course. But a farmer often has some lots that he would like to keep in meadow continually. He may do this by top-dressing immediately after mowing. This is especially desirable with lands seeded to timothy. From several experiments we believe this to be the best time to apply a well made compost, or any coarse manure, and should always attend to it now, if the haying were not so pressing. But with mowing machines and horse-rakes, farmers can accomplish much more than was possible twenty years ago. The manure acts as a mulch to the roots of the grass immediately. It makes the most of every rain and dew that falls, and soon changes the bare meadow to a green field. The aftermath is much more luxuriant, and we get, in the increased burden of grass, a return for the manure within two months of its application. We believe meadow land may be kept up to a yield of three tuns to the acre, by the annual application of compost as soon as the grass is cut.

We have before us a strip of meadow manured at this time two years since, and another by its side treated in the ordinary way, i.e., mowed and left to take care of itself. The one has a promising growth of timothy, and upon the other this grass and the red-top have mostly given place to sorrel. We know of no reason for the difference except the top-dressing in July 1860. We now apply manure to meadow land, more or less, at all seasons, but manage to have a good supply for the land as soon as the hay crop is gathered. By this course, we expect to keep some fields in grass perpetually, with no falling off in the yield.

A Connecticut farmer, recently speaking of the very great value of seaweed, particularly rockweed, told us he had employed an old man with an old horse to draw rockweed last year, and spread it daily upon mowings, from August to November. The loads were small. A very great good effect was seen, but most markedly by far, where the application was made earliest in the season—equally shown in the first crop and in the aftermath this year.

Weeds.

"Slack never thy weeding, for dearth nor for cheap,
The corn shall reward it, ere ever ye reap;
And especially where ye do trust for to seed,
Let that be well used, the better to speed."

Old Tusser uttered many pithy sayings in his rude rhymes, doctrines as sound to-day as when they were uttered. We have now reached a season when many are accustomed to slacken their weeding, and thus lose much that has been gained by the clean tillage of the first part of the season. The corn is laid by, and the potatoes, and weeds grow apace even in the shade of the crops. They go to seed, and completely stock the ground, making work for future years. It is a busy season of the year, and it is thought that labor will pay better somewhere else, than in subduing these pests of the farm. We have seen corn fields well manured, and otherwise well managed, so matted with grass and weeds, that there would be a loss of thirty per cent. on the yield. We have seen oat-stubble, and other fields stocked to grass, so overgrown with weeds that the young grass was choked, and made so feeble that it could not withstand the Winter frosts. We have seen pastures overgrown with Canada thistles, briars, and shrubs, so that they would not yield half a crop of grass, and this of inferior quality.

What is to be done with our August weeds? It is of course too late to cultivate potato fields, as that would lead to the setting of small tubers. Some varieties are already dug, and others soon will be. All sorts, if planted early, would mature by the last of this month, and then the weeds might be turned under by the plow before they have time to seed. One of the advantages of a second crop is, that it makes clean work with the weeds. Turnips, beets, carrots, and all the late crops require cultivation, until it is too late for weeds to seed. Even if the ground lies idle, it will pay to turn in the weeds. Suppose it costs $2 an acre, that is cheaper than to do $4 worth of extra weeding next season.

Corn is frequently cultivated this month, for the third or fourth time, and when the rows are wide enough, and the corn is not too forward, the horse should be kept moving between the rows. If this is not practicable, we can still pass between the rows with the hand-hoe, and cut up the few weeds that have started since the last cultivation. It is cheering to see a piece of corn having the whole strength of the soil, not a weed standing among it. This, if the crop is otherwise well treated, fills out the cob to the end, and handsomely caps it. Cultivation is, to a certain extent, a substitute for manure, and with a plenty of this article, secures maximum crops. Few weeds will be found where corn grows at the rate of ninety bushels to the acre.

There is no better month than this to kill Canada thistles, brush, and briars, that infest pastures. Cut, pile, and burn, without regard to the phase of the moon. Whatever quarter that orb may be in, give no quarter to these pests. There is no economy in cutting down expenses by refusing to cut weeds and brush. Bush scythes would be cheap if they cost their weight in gold. Joe Stubbs has twenty acres of pasture capable of feeding as many head of cattle. One half the area is covered with briars, alders, elders, hard-hack, and Canada thistles. He can only pasture six cows and a horse there, and they are not very well fed. Joe is afraid of the bush scythe in dog-days. It is lonesome work. He is losing at least a hundred dollars a year for the want of it. It would not be lonesome to see twenty head of cattle in there, with no brush to hide them. Elbow grease is very efficacious in subduing weeds, and its use is good economy. JONATHAN.

Choosing a Building Site.

With some persons, the range of choice is very limited. If they are men of business, they must live quite near the shop, store, or office; if they are farmers, they must build the house near the center of their land, or where most convenient to carry on the farm work. But with others, the case is different; and it is to them chiefly that we now make the following suggestions:

I. One thing to be considered in choosing a site, is its *accessibility*. Persons of a poetical or romantic turn of mind might choose to live perched on a high and wooded hill, remote from the common thoroughfares of men. But soberer people would inquire, how are we to get to the house in dark nights, in muddy weather, and in winter? How are we to draw the hay and the wood, and other useful truck? Will it be convenient for our neighbors and friends to visit us, and for us to get to them? Strong as may be our attachments, if it is difficult for us to reach our friends, or for them to get to us, it will place a formidable barrier between us; our visits will be infrequent, and our attachments will gradually abate. The post-office, the church, railway station, stage office, and the store are institutions which men can not well get along without, now-a-days. Let us have an eye to these things, before laying the corner-stones of our permanent dwellings. Crossing many bridges, struggling through muddy roads, or toiling up and down hills, all interfere with accessibility, and should be avoided, if possible.

II. The *surroundings* of a site should be considered. Who, unless he be the smithy himself, owner and proprietor, would want to build a house with the smoke and dirt of a forge just under his windows? Cattle-sheds, pig-stys, a slovenly neighbor's out-houses, any kind of building used for manufacturing purposes, a slaughter-house, a quagmire,—in short, any thing and every thing in the line of nuisances ought to be avoided. One may think, perhaps, that custom will reconcile him to almost any thing; but not so, if he or his family are persons of sensibility. Whoever builds in the neighborhood of a nuisance will find it a source of continual mortification and regret, and will be quite sure, ere long, to sell out his property at considerable sacrifice.

In some places, a number of persons club together and buy a tract of land for building-sites, entering into a written contract that neither they nor their heirs or assigns shall use the land for other purposes than for residences and gardens. At Llewellyn Park, in Orange, New-Jersey, a similar plan has been adopted. A large tract of land is owned by a corporation, who offer building sites for sale on condition that the houses put up shall be of a respectable character, and shall have nothing in their appurtenances to offend good taste.

A small annual tax is assessed upon the lot-owners to meet the expense of keeping the roads, fences, etc., of the Park in repair. In such an arrangement, it would seem that one might enjoy the elegancies of a refined rural home in the midst of a handsome landed estate, without the expense and trouble of taking care of more than the small spot immediately around his own door, and perhaps the garden in the rear.

III. The *healthfulness* of a site is an important matter. One would hardly wish to build on the edge of a marsh, or of any standing water, unless he is proof against malaria. Then, there are some situations where the wind sweeps violently through gorges, or up and down long valleys, which are alike unhealthy and disagreeable. Low grounds generally are subject to dampness in Summer, and to extreme cold in Winter. But in avoiding low grounds, let us not go to the other extreme of pitching our tent on a high and bleak hill. A site moderately raised above low flats, yet not on the hill-top, is ordinarily the most salubrious, as it is the most pleasant. Such sites afford pure air, pure water, good drainage, and cheerful prospects, all of which are conducive to health and happiness.

IV. The *nature of the soil* should be looked to. Whoever builds in the country, builds there principally for the sake of having a little farm or garden and orchard, and ornamental trees. But these will not succeed well on a rocky bluff, a sandy plain, or a bed of clay. Is the soil good for farming purposes? Will it grow corn and potatoes well? If so, then an important question is settled. For, if it will raise these, it will raise magnolias, pears, grapes, wheat, and whatever else one has a mind to cultivate. If the soil is poor to start with, time and money, and a great deal of patience, will improve it; but the process will be very laborious.

V. Any improvements already made upon a site should have considerable weight in determining one's choice. An orchard, not too old and scraggy, a few good shade trees of large size, any amount of grading, draining, manuring, fencing, etc., that may have been done, is only so much time saved, and so much money invested for the buyer's benefit. Pleasant as it is to create one's homestead wholly, yet life is short, and it is quite a help to have a few things already created to one's hand.

We might add other hints, but these are all that our crowded columns will now admit. To all contemplating building dwelling houses, we say, think *twice* before you build once.

Spontaneous Vegetation.

To the Editor of the American Agriculturist.

"Now, did this vegetation spring from an original principle in the soil, or from seeds, perhaps a thousand years old, buried in that hill? How came they there? Did the fire beget them?"

The foregoing "nuts" of SCHOLASTICUS, in the June No. of the *American Agriculturist*, may not, after all, prove to be as hard-shelled as some imagine. I am rather of the opinion that a little impression may be made upon some of them, by striking them in the right way. It is well known that the seeds of many plants will retain their vitality for an indefinite length of time, in favorable situations. I saw an account not long since, of seeds being found with an Egyptian mummy, that had remained for *thousands* of years entombed with the body, which readily germinated, on being planted in suitable soil. After the burning of the timber of an old "girdling," in my immediate vicinity, "multitudes of a cruciferous plant," (the *Brassica rapa*) were found growing, in some of the beds of the burned logheaps, which excited the wonder and astonishment of the whole neighborhood. It was at length ascertained that the part where the *rapa* was growing in such quantity, had, about twenty years previous, been a "turnip-patch." The seeds of numerous plants, as every body knows, require a very great amount of heat to make them sprout. Some, for this purpose,

pour boiling water on onion seed. The vitality of some seeds is preserved by water. The bulblets of the *Lemna* (Duckweed), always remain from Autumn until Spring, in the bottom of shallow ponds, and if carried into deep water, and then should sink below the warming influence of the sun's rays, instead of rising to the surface and germinating, *might* remain for years, and still retain their vitality. The *Isnardia palustris*, an aquatic, growing in the bottom of streams of water, will flourish equally well if the stream happens to change its course and leaves the plant on dry ground. The *Hibiscus moscheutos* I have frequently transplanted from the borders of lake Erie into dry ground, and it has uniformly flourished as well as in its native marsh. And so of scores of other plants.

We *know* that *seeds* will produce plants. It has been demonstrated ten thousand times before our eyes. But that they have ever been produced in any other way, since the formation of the first specimens, described by Moses as the third day's work of the Creation, *I* have no evidence for believing. To depend upon an "original principle in the soil" for a crop of weeds even, I should consider a very uncertain affair. I sow the seed, believing, with Paul, (II. Cor. xii. 28) that "God giveth to every *seed* his (its) own body." But if the soil produces plants without seeds, it can be proved. Institute a thorough examination, with magnifying glasses of high power, when the *thing* first starts into being. Trace it down to the "center of motion," and if there is absolutely no cotyledon, none of the essential organs of a seed, *then* write under the examination Q. E. D. DISCIPULUS.

Little Mountain, Ohio, June 1862

Tim Bunker on the Cost of Pride.

"Father, have you seen the *Agriculturist?*" asked Sally, as she handed her second baby to her mother and the paper to me. I had been to the post-office that afternoon, and had not had a chance to look at it, even if I had been in the house long enough to do it. This is generally the way; the women have the first cut. I have known Mrs. Bunker to leave a batch of dough she was mixing to read the paper, and that I guess is about the last thing a house-keeper ought to leave, especially if the yeast is good.

You see it so happened that Sally and her children came over from Shadtown that afternoon, to make us a little visit. She has always been good about coming home, and since John has been gone to the war we have seen more of her than usual, which is very thoughtful in her.

"Well no, I haven't. What is in the wind now?"

"Just read what a Western Farmer says about your taking lessons in spelling. You see you get great credit for my correcting your letters?"

"Credit, girl! The man is poking fun at me for writing out of character. I knew it would come to this, if you and the printers didn't let my spelling alone."

I have never told the public what lots of trouble I have about these letters, being a modest man, and not caring to push my private matters into notice. Folks are so awful proud now-a-days that everything has to be fixed up before it can show itself, from a baby's dress to a President's proclamation. They even find fault with Lincoln's State papers, because the rhetoric isn't quite tall enough, and the grammar don't always break joints. I'm expecting nothing else but they'll get out a new edition of the catechism, and our children will be taught "The chief end of man is to fix up."

You see in the first place I didn't want to write at all, considering that I understood the use of a plow enuff sight better than the use of the pen, and remembering that old saw "Let the cobbler stick to his last." I still think there is wisdom in that saying. But you see the editor thought I had better write, that I ought not to hide my light under a bushel, and all that sort of thing. He was very civil in his compliments, and what was I that I should set up for knowing more than an editor, and the editor of the *Agriculturist*, too? I thought he ought to know what sort of talk would edify farmers, and I didn't pretend to be any thing else. So I promised him that I would write for one year, and have kept on ever since.

Then Mrs. Bunker didn't want me to write; 'twould make a public man of me, and folks would come to stare round the house, as if they expected to see a lion in his cage; lionizing I believe she called it, and I suppose that was about what she meant.

Then Sally put in agin' my writing; said she should be ashamed to have my letters to her printed, because the spelling was awful. She admitted the sense was good enuff, about equal to any thing they had in boarding school, but the grammar and the spelling wanted fixing. So I had to tell her if the spelling didn't suit her, she might fix it to suit herself. For my part I couldn't see why it wasn't just as well to spell words as they sounded, as to follow the dictionary. I thought plow was about the same tool, whether they spelt it with a *w* or *ugh* at the end; one was considerable shorter than the other, and would save ink; besides, every body would know what I meant, and that was the end of talking or writing, to be understood. But I couldn't convince her by any common sense arguments, that my spelling was good enuff.

So "Western Farmer," and the public will see that my ideas have to go through about as much grinding and fixing before they come to light, as a bag of wheat does before it comes on to the table in the shape of bread. Sally must have her say, and the editor his, and the printer puts in the stops and pauses; so that by the time my ideas get back to me in the paper, I don't hardly know them. Some of them look as if they had been to college, and some to boarding school, and some brought up on a farm. But I take it the sense is understood, which is the chief thing.

There is one thing I don't exactly understand, why they should put in what Jake Frink says, and Uncle Jonathan, and the rest of them, just as I write it, and practice their fixing up on me. I talk for all the world just like Seth Twiggs, but Sally says that is the vernacular, and don't look well in print. Perhaps it don't. Tastes differ. I don't think it pays for altering. In my opinion Sally had better mind her babies than to be tinkering with my spelling, and I guess the public would understand my writings quite as well if the printer didn't spend so much time on the commas and exclamation points. Why, any fool would know when a question was asked, without the sign. They say they keep a fellow in the printing office at about $3 a day, just to tend to this kind of tinkering. I don't think it pays; but that is none of my business.

This pride shows itself everywhere, and is about as troublesome on the farm as in the city. I am afraid it will be the ruin of the nation yet. It seems to grow worse the longer I live. It costs me a great deal more to live than it did my father, and if John ever gets back alive from the war, he will never be able to live in the simple way I have done. Pride costs more than all other necessary family expenses. It has made many a man a bankrupt, and it keeps a good many of my neighbors poor. Every thing they earn is spent upon their backs, or upon ornamenting and fixing up their houses and farms. Farming is a good business, and pays all decent demands upon it, but it will not support much pride. A fence that costs a dollar a rod will turn cattle just as well as a faced wall of hewn stone, costing twenty times as much. The nineteen dollars extra goes to the support of pride, and farming ought not to be expected to foot the bills. A barn that will shelter hay and cattle, is just as good as one costing four times as much, finished as elegantly as a dwelling. Farming will not pay for the clapboards, the lath and plastering, the ceiling and varnish. If a man has made a fortune in trade, there is no objection to his building a country seat, and living like a prince. His profits will support his pride. But the profits of ordinary farming will not justify a like expenditure. He may keep, if he will, a servant to each member of his family, but a farmer must serve himself. When he gets above his business he had better leave it. It strikes me that a farmer's pride ought to run to his business, rather than to his walls, and buildings. Other folks have to have dwellings, barns and fences, and it is no great shakes to own good lumber and paint. But farmers only have a deep rich soil, fine wheat and corn fields, and luxuriant meadows. It will pay for a farmer to cure a horse-pond, to drain a swale, or to turn a barren pasture into a meadow that will cut three tuns of hay to the acre. It will pay for him to raise fine horses and cattle, pigs and sheep. He ought to gratify his pride in the line of his calling, and not undertake to rival merchants and nabobs. If he fixes up his fields and breeds good points in his stock, people will not trouble themselves very much whether he says *cow* or *keow*, or attends spelling school late in life.

Hookertown, July 15th, 1862. Yours to command, TIMOTHY BUNKER, ESQ.

[Squire Bunker's, like the rest of our correspondence, has to go through the mill.—ED.]

Book Farming.

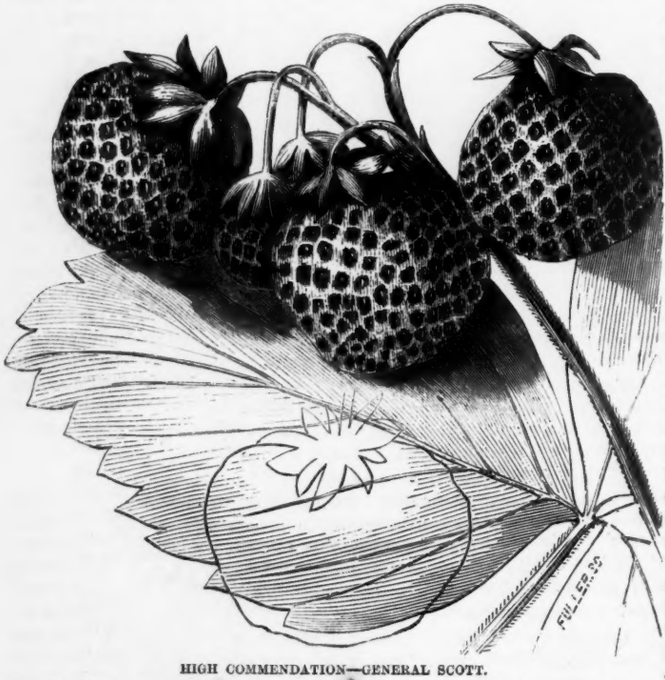
We sometimes meet with farmers who deride book-learning as useless, yea, as even hurtful to the interests of agriculture. Give us experience, they say; that is enough, and that is safe. We know one farmer in particular, a shrewd, keen man, who learned his calling from his father before him, and who still learns much by visiting his brother agriculturists; but he has a mortal prejudice against book-farming. Probably, much of what he knows and prides himself on knowing, is really the product of scientific study by bookish men. If many of the useful methods which he practises had never been disseminated through books, perhaps neither he nor other farmers would ever have known them.

When a man has learned something really useful, (no matter how he learns it,) why should it not find its way into print for the benefit of others? But no—oh no! for then it would become book-farming. Some one has likened such a narrow-minded man to the great Omar, who said of the books in the Alexandrian Library, "If they contain only what is in the Koran, they are not needed. If they contain what is not in the Koran, it must be false. Let them be burned." So, if papers and books contain only what he knows, they are useless; if they contain anything he does not know, they must be false, and should be discarded, if not burned.

FIRST PRIZE SEEDLING—BROOKLYN SCARLET.

The Agriculturist Strawberry Show.

The time appointed for the exhibition of Strawberries at the Office of the *American Agriculturist*, was well selected, taking into view the lateness of the season, as it came in the very hight of Strawberry time. A few valuable varieties were *past*, but most were in their prime. down the sides, was glowing with strawberries and roses, and crowded with gratified visitors from 1 o'clock on Friday till 6 o'clock on Saturday evening. Before visitors were admitted, the Committee, consisting of Dr. I. M. Ward of Newark; P. B. Mead, Editor of the "Horticulturist"; R. G. Pardee, author of the "Strawberry Manual," and Lowell Mason, jr., Esqs., had finished their examination, and very soon after, the names of exhibitors and the cards indicating the awards were placed upon the plates. The show was a very instructive one, on account of the great number of choice varieties, and the perfection of the berries. There was considerable competition for the prize offered for the largest three berries. The prize was taken by Mr. Heins of Woodstock, an amateur, with three berries of the Triomphe de Gand, 5¼, 5½, and 6 inches in circumference, and weighing altogether 2 ounces. The cut which we present represents them very well, and shows the tendency of the Triomphe to assume the cockscomb shape, so far as to form almost perfect rosettes, the stem being in or near the center of the flat, circular fruit. The show of varieties from the Marshalls was very fine, the berries being of large size, in fine order, and of valuable varieties. Mr. Heins showed other very well grown berries of choice kinds also, doing great credit to him as an amateur cultivator. Mr. Fuller has for some years been growing famous on account of his success in raising fine seedlings; the choicest of his collection were presented, with the exception of some which were already past, among which was the Bartlett, a fine berry, and very early; it is also one of those varieties, plants of which we have been distributing free to new subscribers. Mr. E. Williams' berries were fancifully arranged in cones, and made quite a show, attracting much attention from visitors, but the berries did not appear by any means so well as if they had been in plates, though the collection included many choice kinds. The collection of Mr. Prince was interesting from the number of his own seedlings that it contained. It was, however, entered for exhibition only, therefore shielded from criticism, and ought not perhaps to be compared with the beautifully grown berries exhibited by others.



HIGH COMMENDATION—GENERAL SCOTT.

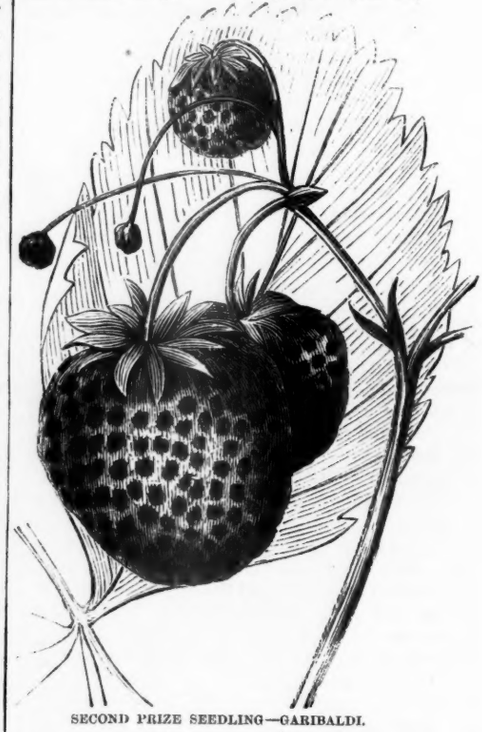
We give a list of exhibitors and varieties shown by each on next page. The spacious office of the *Agriculturist*, with tables extending through the middle from Park-Row to Nassau-street, and

We give engravings of three of the seedlings, which received the notice of the Committee, and regret our inability to show also a cut of Mr. Burgess' *Little Monitor*, which received the premium as the best flavored seedling.

Brooklyn Scarlet, raised by Mr. A. S. Fuller, of Brooklyn, as announced in the list of premiums published last month, took the prize as the best seedling. It is well represented in the engraving. Berry large, long conical, symmetrical; color bright scarlet; flesh nearly white, firm, and juicy; seeds brown, prominent; calyx large; flower-stalk stout; flavor good; quality *best*. Plant hardy, vigorous, very productive, rather late; flowers perfect.

Garibaldi, raised by Mr. Wm. A. Burgess, of Glen Cove, received the second prize. Berry large, elongated, semi-cylindrical, (often more so than the cut represents); color rich crimson; flesh light colored, firm; seeds moderately depressed; surface glossy; flower-stalk erect and stout; flavor sweet and excellent; quality best; plant hardy, productive; foliage large, vigorous, and shadowing the fruit; early; flowers perfect.

General Scott, also raised by Wm. A. Burgess, received the high commendation of the Committee. Berry large, nearly round, with neck and calyx easily separable; color bright scarlet; flesh streaked with color, firm; seeds deeply imbedded; fruit-stalk erect, stout, flavor and quality best. Plant very vigorous, hardy; foliage large and of a dark, rich green; flowers perfect; ripens early.



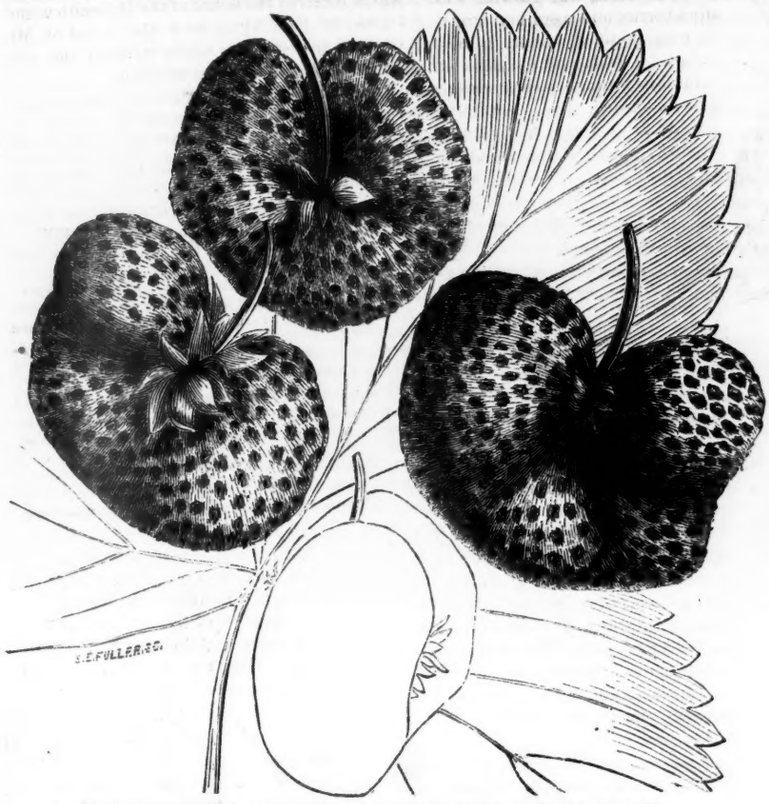
SECOND PRIZE SEEDLING—GARIBALDI.

Little Monitor (Burgess) is a medium-sized, round, light-colored, white-fleshed berry of excellent flavor and exquisite quality, firm, but smooth and delicate in texture.

Monitor, another of Fuller's choice seedlings, was exhibited, but being the last pickings of the season, was not entered for the premium. We esteem it very highly as one of the very best of the larger berries. It is described by the committee of the Farmer's Club as follows: Berry very large, obtuse conical; color scarlet; flesh light colored, firm, and moderately juicy: seeds dark brown, prominent; calyx large, and easily parting from the berry; foliage large, coarsely serrated; flower-stalk stout; flavor good; quality best; very productive; early; flowers perfect.

[Mr. Fuller requests us to state that his 3 Seedlings, Brooklyn Scarlet, Col. Ellsworth and Monitor, are disposed of.]

The engravings we present were very carefully drawn from the fruit, and represent faithfully the size and character of the individual berries, of which they are portraits. The outline below the *General Scott*, is the size of a berry not of the group drawn, but not of an uncommon size. The berries selected for drawing the seedlings were not the largest in any case, but only a little above the average, and selected for showing the characteristic shape of each va-



WINNERS OF PRIZE FOR THREE LARGEST BERRIES—TRIOMPHE DE GAND.

riety. The outline with the large berries is that of the largest, from another point of view.

This exhibition, like others already held and purposed to be held in the office of the *American Agriculturist*, was undertaken solely with a view to advance the knowledge of an important subject, deserving the intelligent appreciation and investigation of the public; and except so far as it is an advantage to the *Agriculturist* to be recognized as earnest, wide-awake, and discriminating in all these matters, we sought no selfish ends. Our tables were offered free to any who would exhibit, and the decision of a wise and fair committee, very satisfactorily distributed the prizes offered where they were certainly due. It was therefore with no little surprise that we found notices appearing in one and another of our city cotemporaries, and in the Country Gentleman, reflecting both upon the management, and upon the exhibitors, stating that half the latter were not present in time for the examination, greatly extolling the berries of Prince & Co., and giving the impression that the fruit of those who came too late by far surpassed the others. Nothing could be more false, for not a single person who intended to show for a prize, failed to have his berries here promptly. We have traced these lying notices to their source; of their author—a man who would benefit himself by detracting from the fairly won laurels of others—we have nothing to say; but must express our surprise at the ungenerous notice, which our usually *gentlemanly* agricultural cotemporary gives "The Strawberry Exhibition in New-York."

LIST OF ENTRIES.

Prof. Huntsman, Flushing, L. I.—Seedling

John Rassbach, West Bloomfield, N. J.—Ward's Seedling.

Mrs. M. Pryer, Newtown, L. I.—Wilson's Albany.

Parsons & Co., Flushing, L. I.—Cutter Seedling, Triomphe de Gand.

Patrick Ryan, gardener to J. B. Colgate, Esq., 47 Wall-st., New-York.—Trollope, Triomphe de Gand, Austin.

H. E. Legg, Kingston, N. Y.—Wilson's Albany.

John Drummond, gardener to Mrs. J. H. Strong, Flushing, L. I.—Black Prince, Wilson's Albany, Jenny Lind, Triomphe de Gand, White (Bicton Pine), 3 large berries.

Wm. A. Burgess, Glen Cove, L. I.—Four new seedlings—No. 8 A, No. 8 B, (Garibaldi), No. 8 C, (Gen. Scott,) No. 8 D, (Little Monitor).

G. H. Banta, Tappantown, N. Y.—Wilson's Albany.

E. & G. Marshall, Poughkeepsie, N. Y.—Wilson's Albany, Great Austin, Triomphe de Gand, Longworth's Golden Seeded, Voorhies' Seedling, Scott's Seedling, Peabody, Ward's Favorite, Monroe Scarlet, Princess Frederick William, Gen. Havelock, Delices d'Automne, Jenny's Seedling, Trollope's Victoria, Pyramidal Chilian, Hovey, Willey, Fragrant Scarlet, Westchester, Bicton Pine, Scarlet Magnate, Elton, Dundee, Huntsman's Pistillate, Duchesse, Feast's Fillmore, Imperial Scarlet, Duc de Brabant, Iowa, McAvoy's Extra Red, Hooker, La Belle Bordelaise, Black Prince, Brighton Pine, Walker's Seedling, Boston Pine, Madame Louese, Crimson Cone, Downer's Prolific, Prince's Climax, Large Early Scarlet, Ohio Mammoth, Bullett, Chorlton Prolific, Genesee, DeThury, Jenny Lind, British Queen—(48 varieties.)

E. Williams, West Bloomfield, N. Y.—Triomphe de Gand, Ward's Favorite, Hovey, Wilson's Albany, Trollope's Victoria, (variety for name,) Great Austin, Scott's Seedling, Honneur de Belgique, Duc de Brabant, Iowa, Black Prince, Genesee, Ward's Favorite, Boston Pine, Moyamensing, Jenny Lind, Early Scarlet, Pennsylvania, New Richmond, Monroe Scarlet, Orange Prolific, Scarlet Cone, Crimson Cone—(25 varieties).

Wm. F. Heins, Woodstock, N. Y.—Hooker, Sir Harry, Triomphe de Gand, Great Austin, Victoria, Langstroth Improved, Wilson's Albany, Pyramidal Chilian, Cutter's Seedling, Longworth's Prolific, Scott's Seedling, Chorlton's Prolific, Jenny Lind, Boyden's Mammoth, McAvoy's Superior, Peabody, Ladies' Pine, Scarlet Runner, Bartlett, Early Scarlet, Downer's Prolific, Le Baron, Walker's Seedling, Prince Diadem, Athlete, Vicomptesse Hericart, White Pine Apple, Albion, Lennig's White, (new seedling, 2 seedlings for competition of flavor—(32 varieties).

C. S. Pell, N. Y. Orphan Asylum.—Wilson's Albany, Great Austin, Triomphe de Gand, White Alpine.

Wm. H. Goldsmith.—Hooker.

A. S. Fuller, Brooklyn, N. Y.—Seedling, Triomphe de Gand, Trollope's Victoria, Downer's Prolific, Deptford White, Duke de Malakoff, Monte St. Julien.

Solon Robinson, Yonkers, N. Y.—Wilson's Albany.

Wm. Kearns, gardener to Wm. Shaw, Clifton, Staten Island, N. Y.—Longworth's Prolific, Wilson's Albany.

John Boyce, Fishkill, N. Y.—Triomphe de Gand—(three large berries).

C. M. Saxton, N. Y.—Mead's Seedling—(exhibition.)

J. C. Thompson, Staten Island, N. Y.—Downer's Prolific, Great Austin, Triomphe de Gand.

J. Noble, Bowronville, Brooklyn, N. Y.—Four varieties.

W. R. Prince & Co., Flushing, L. I.—Ariadne, American May Queen, Great Austin, Chili Hybrid, Diadem, Downer's Prolific, Fortunatus, Hooker, Hovey, Hudson's Bay, Fillmore, Globose Scarlet, Imperial Scarlet, Iphigene, Jenny Lind, Ladies' Pine, Longworth's Prolific, Le Baron (Pine), Malvina, McAvoy's Superior, McAvoy's No. 1, Ophelia, Perfumed Cone, Primate, Prince's Late Globose, Scarlet Melting, Scarlet Prize, Scarlet Magnate, Sirius, Scarlet Globose, Barnard's Illinois, Stewart, Suprema, Victorine, Welcome, White Pine Apple, Seedlings (No. 1, 12, 13, 15, 18, 21, 23, 26, 28, 34, 38, 42, 45, 48), Bijou des Fraises Hautbois, Belle Bordelaise Hautbois, Male Hautbois, Green Pine Apple, Alpine Monthly White, La Mendonnaise Alpine, Montreuil Wood, English Ladies' Finger, Comptesse de Beaumont, La Sultane, Lucas, La Constante, Marguerite, Orb, Oscar, Prince Imperial, Rifleman (Ingram), Vicomptesse Hericart, Wizard of the North, Empress Eugenie, Triomphe de Gand—(57 varieties, besides the seedlings) (for exhibition.)

An Amateur.—Scott's Seedling.

George F. Meyer.—Hovey's Seedling.

L. M. Pease, N. Y. Farm School.—Triomphe de Gand, Wilson's Albany, (very superior).

D. P. Usher, Staten Island, N. Y.—Peabody.

Wm. Parry, Cinnaminson, N. J.—Triomphe de Gand.

F. P. Sanford, Orange, N. J.—Triomphe de Gand.

Mr. England, Bushwick, L. I.—Gooseberries.

Alfred Waller, Brooklyn, N. Y.—Whitesmith's Gooseberries.

A. S. Fuller, Brooklyn, N. Y.—Cherries for name.

Charles Mandeworth, Dutchess Co., N. Y.—Cucumbers.

A. Bridgeman, New-York.—Six pots Gloxinia, very beautiful.

What Blackberry shall we Cultivate?

None, say we, very decidedly, unless you have room for them, and will take care of them. We have plenty of wild fruit, in most years, of very fair quality, and unless we can get a steady supply of a superior article in our gardens, it were better to plant them with cabbage and sweet corn. These are certain to have room enough, and to be cultivated.

We are afraid many who have purchased plants, the last few years, under the inducements of pictures and advertisements, have made poor investments, not because we have any doubts of the excellence of the fruit, but of the good sense and skill of the purchasers. It will take years of experience and choked plants to get rid of the popular notion that, because a blackberry plant takes care of itself in the pasture, it will do the same in the garden, and yield good crops. It will do nothing of the sort. Neglect the best variety, and it will give not much better results than wild plants—a little fruit on one plant out of a dozen, in years of average moisture. We say then, unless you have a place in your garden that you can give up entirely to this plant, do not waste time and money in buying plants. They should be attached to trellises or wires, as this supports the lateral shoots much better than stakes. Most of the fruit grows on these laterals, and where they do well, they need support on account of the weight of the fruit. Trained in this way, it is easy to do the shortening-in at this season, with the thumb and finger, and to throw the energies of the plant into fruit-buds for next season.

The New-Rochelle very generally does well, and gives satisfaction to pains-taking cultivators. It is acid if picked before ripe enough to drop off, and it decays if neglected too long—the canes are sometimes winter-killed—charges that may be brought against other very good varieties of fruit. The fact that it has become so widely disseminated in so short a time, is a pretty good test of merit. It, however, fails in some soils and climates, with the best care.

American Forest Trees.

A little examination will serve to surprise one at the richness of our North American Sylva. We would by no means disparage trans-Atlantic good things; but when our own vast continent furnishes us so many species and varieties of trees, and some of them the grandest in the world, let us not overlook them in the search for foreign novelties.

It will surprise those who have not looked into this matter, to find that many rare trees, with strange-sounding names, are natives of our own land. Among conifers, take the following: *Pinus flexilis*, *P. ponderosa*, *P. monticola*, *P. Sabiniana*, *P. Lambertiana*, *P. insignis*, etc., are natives of Oregon and northern California. *Thuja gigantea* comes from the Rocky Mountains; *Juniperus occidentalis*, from Utah; *Abies Menziesii*, from Sitka, lat. 57°; *Cupressus Nootkaensis*, from the region about Nootka Sound; *Abies Douglasii*, *A. nobilis*, and *A. amabilis*, from Oregon, between lat. 42° and 50°; *Abies bracteata*, and *A. Williamsonii* lie a little further south than the foregoing. Near the sea, and in lat. 41°, we find *Cupressus Lawsoniana*, and *Sequoia sempervirens*, (California Red Wood,) and on the mountains of the same latitude the *Sequoia gigantea*, the famous Big Tree, called also *Wellingtonia* and *Washingtonia*.

These will serve as specimens taken from a single department; and there are many more, hardly less remarkable. Now, it gives one the sense of a new possession, and a feeling of patriotic pride, to find that such trees are American.

Another interesting discovery is, that some of these trees, though of northern origin—some of them even found along the snowy ridges of Oregon—are yet somewhat tender when transplanted into the same, or a lower, parallel of latitude at the East. Taking our illustrations again from among evergreens, here is *Thuja gigantea*, from the Rocky Mountains, in lat. 53°, but when set out in the neighborhood of this city, in lat. 40° or 41°, it is represented as "not quite hardy." *Abies Menziesii*, found at Sitka, lat. 57°, is cut up by the winters of lat. 43° at the East; *Abies Douglasii* grows wild on Vancouver's Island, lat. 50°, yet it can not be relied on here, in lat. 43°. Yet, again, strange to say, *Pinus ponderosa*, found in the interior of Oregon, north of lat. 50°, is as hardy all over our North-Eastern States as the native hemlock. The same may be said of *Thuiopsis borealis*, found wild north of lat. 50°. *Pinus Lambertiana*, found between 42° and 43° bids fair to succeed in the same latitude at the East. *Cupressus Lawsoniana*, found lower down, and near the Pacific coast, is trying hard to be hardy in the same latitude on the Atlantic.

Here we have a few instances, out of many, of a general fact, that the hardiness of a tree or plant can not be positively determined by the latitude or longitude in which it is found indigenous. Many circumstances go to determine its hardiness. It is affected much by its geological position, not a little, also, by its altitude above the level of the sea, by the prevalence of certain winds, by the amount of moisture in the atmosphere, by the protection of surrounding hills and forests, and other unknown and imperceptible causes. If, then, we wish to ascertain whether a certain, untried tree is hardy or not, we may form some *conjecture* from the latitude in which it is found, but can arrive at *certainty* only by a fair *experiment*.

This, too, should be borne in mind by every planter. In transporting a tree from one part of the country to another, he will be very likely to fail unless he surrounds the tree with nearly the same conditions of soil, exposure, etc., as it had in its original habitat. Take this familiar example: the *Kalmia latifolia*, and *Rhododendron maximum*, and American Holly, all grow wild north of 43° in New-England; but if we remove them south of that line into New-York, and yet give them unsuitable soil and aspect, they will dwindle away and perish. Unthinking persons will suppose they are "too tender for the climate," when in reality they are hardy enough, but are mismanaged.

In the foregoing paragraphs, we have only touched on a few points of interest in this subject, and must leave them for our readers to follow out at their leisure. At another time we shall return to the inviting theme.

A Hint to Tree Fanciers.

In our random experiments, last Spring, we met with a result which both surprised and gratified us. A Scotch larch, which had been planted in a certain spot, several years before, had become too large for the place it occupied, and must either be removed or cut down. What was to be done? A council was called, and soon a compromise was agreed on, for at least one year. The plan was to let it stand, but to head it in several feet at the top, and to shorten in the side branches full half their length. Heretical treatment, surely, but we gave it, and then waited results.

The tree being in a distant and secluded part of our grounds, we did not notice it particularly until about the first of June, when its appearance surprised us. The foliage had come out with unusual strength, and clothed the tree in a mass of heavy, rich verdure from top to bottom. We had trimmed it into a tapering or conical shape, like the Juniper, or Lombardy Poplar, and now it was a beautiful, thickly tufted shaft of the most vivid green, altogether unlike the tree as commonly seen. The leaves were fully double their usual size, being nearly as long as those of the Austrian pine, and of the same color, only glossier and brighter. Not an inch of trunk or limb could be seen amid the mass of leaves. At a little distance it resembled a fine specimen of the Austrian pine, pruned into the Juniper form. It is now one of the most remarkable sights in our grounds, and we congratulate ourselves on the discovery.

Where to Feed Trees.

It is no uncommon thing to see a little circle dug around large fruit and ornamental trees, and a heap of manure applied. Perhaps this boys' play does no hurt, but what good does it do? We might fancy the old tree looking down upon the workman with a sort of disgust and indignation, and saying: "What are you about, Sir? Are you thinking to benefit me by scratching around my bole? No, no, Sir: my roots are out yonder, many feet away; my thousand mouths are far off, open and waiting for the food which they can not get so long as you confine it to my senseless trunk."

Any person can see a good illustration of our point, if he examines the grass under an oak or ash, or other gross-feeding tree. If the soil is rather poor, he will find the grass brown and dried in mid-summer; and the dryness will be greatest at the ends of the roots. This circle will enlarge every year, the roots exhausting the nutriment of the ground as they extend.

Now, obviously, the way to treat such trees, and all others that we wish to thrive, is to manure and till the ground all over the surface of their roots, but more especially at the extremities, for it is there that they take in the most of their food. This is the very best way, but the next best is to manure the entire surface of the grass above the roots once a year; the nutriment will much of it find its way down to the roots.

Potatoes Mixing in the Hill.

Some errors have more lives than a cat. Kill them thrice dead, and bury them, yet they will not stay dead. The above notion is one of these instances of persistent resurrection. We shall not stop now to do anything more than hit the thing a rap, and then pass it by.

It would seem plain to every mind that no plant can "mix" through its branches and roots. Set the elm-tree in the same hole with a beech, and let their roots and branches grow and twine together for a century, and will there be any mixing of the two? Or let a red elm and a white elm grow side by side, or a red and white beech, and will either, in process of time, become streaked? Who has not seen the red and white peony growing side by side for many years without any mixing? And the same may be said of any plant which is propagated by divisions of the roots or tubers. Now, the potato is a tuber, like the peony. As we plant it, it is not the seed, but the tuber. And it will no more mix through this root than the peony through its. The only possible way of mixing this or any other plant is through the flower and seed.

When different varieties of a plant, (say the peony, potato, or what you will,) grow side by side, and blossom at the same time, the pollen of one flower is often blown, or carried by bees, to other flowers, and thus produces a cross fertilization. The stigma of one blossom is impregnated by the pollen of another blossom; then the seed is matured and ripens. Now plant this *seed* (not the *root*, remember, for that has not been affected at all,) plant the *seed*, and we shall be likely to get a new plant having a mixture of the two varieties. Thus, if we sow the seed-balls of our potatoes, we shall doubtless get a mixture of varieties, but we may plant pieces of their roots to all eternity, and there will be no mixture. Indeed these roots are not real roots, but only enlargements of the branches.

But some persons reply: we don't care a fig for science; for we have *facts* to prove that potatoes do mix in the hill. And here, a cotemporary well observes: "No theory, however absurd, can be started, but some are ready to furnish proof of its correctness from actual observation. Had the Messiah presented the question to the people of this day, which he did to the Jews some 1800 years ago,—'Do men gather grapes of thorns, or figs of thistles?'—some would be ready to reply in the affirmative, and declare that they had seen it done." So now, men have *facts* ready to prove that wheat changes to chess; the influence of the moon's rays on vegetation and pork; and that potatoes mix in the hill.

Let, however, a few other facts be noted, which throw some light on our subject. A parti-colored potato, if planted for a few years in a sandy soil, becomes lighter, and darker if grown in a heavy, clay soil. Plant only the light colored parts of the mercer, and the crop will be chiefly white. Plant several sorts of potatoes in the same field for several years in succession, and the finer varieties will be found mingled among the coarser, because the latter always

produce more abundantly than the former, and will get mixed with others, by careless hands. Sometimes a lot of one kind of potatoes is left in the ground over Winter, and next year we find them mixed with others—"mixed in the hill," indeed. Then, in the haste of gathering and housing, it is not strange that one sort gets mixed with another. And then in the Spring planting, when the different kinds are cut up and carried to the field, hired men will sometimes mix the kinds without knowing it. In fact, it is almost impossible to prevent this where small potatoes are used for planting, because the kinds are then not easily distinguished. *Facts* will always show that potatoes do not mix in the hill, unless it is done by the planter.

Celery in the Trenches.

It is much the best way to get a winter supply of this delicious salad, to make late plantings any time this month. Nothing is easier, after you learn how, than to grow it in perfection, tender, crisp, and juicy. The more rapid its growth the better. No plant delights more in moisture, and if the trenches are in well-drained soil, it is well to water copiously every other day. Stir the ground often, and do not begin to earth up much until the plants are a foot high or more. If the plants show any lack of vigor, top dress with compost from the sty or hennery.

Bare Spots in the Garden.

Sow them with spinage early this month, and you will have greens in September. If sown the latter part of the month, and covered with straw, prairie or sedge hay, a nice spinage bed is ready to be drawn from in May and June. Or the vacant places may be sown with quick growing flat turnips for late Fall use or for feeding. Even ruta bagas will grow to a good eating size if sown on rich soil the first of August. Radishes and lettuce may be sown at any time during the month for a late crop, and black onion seed may be sown late in August, or early in September, and left to grow thickly for seed for early rare-ripes in the Spring. Peas may still be sown, with a reasonable prospect of a crop before frost. Asparagus may be sown as soon as the seed is ripe, and one year will be gained in the future growth, as good strong roots will be ready to transplant one year from the following Fall or Spring.

Natural Products of Colorado Territory.

BY A COLORADO FARMER.

GRASSES.—These are divided into lowland and upland: of the former there are two species—the jointed, coarse, tall, and the broad-leaved and soft. They are both cut for hay. The upland, are the bunch, and buffalo grass. Besides these we have wild oats, barley and rye in the valleys and on the mountains. I have seen the latter 6 feet high, with heads 12 inches long, at an altitude of 9,000 feet above the Missouri river. The oats, barley and rye are not worth cultivation.

Our highland grasses have a peculiarity unknown in the tame grasses. They ripen and cure on the ground, retaining a large part of their capacity to sustain and fatten stock. We can show you any day in Denver market, beef fatted on grass, and fed during the whole Winter on dry grass, equal to any grain and stall-fed cattle East, and doubtless more healthy. Fifty pounds kidney fat is not extraordinary here; this too from cattle worked across the plains the same year, and all our cattle are selected for work and not for beef. Poor stock of all kinds not only live through Winter, but absolutely fatten on our dry grasses.

Our cows show the superiority of these grasses in the quality of the milk. No better butter can be produced on the continent than here. I have a cow which has been milked all Summer, and all Winter, so far, without feeding hay or grain, and to-day she is fit for the knife. It may be added that she has had no shelter for two winters. At this date, January 8th, cattle teams are almost daily arriving in good order, having drawn loads 700 miles over the plains and subsisted on dry grass alone. If these statements are correct, you see how little feed is necessary for unworked stock.

The principal and best of these grasses is the Buffalo grass, so-called from the fondness of our wild cattle for it. I esteem it almost equal to oats in the sheaf. When it can be had stock leave all others and go miles to obtain it. It grows thriftily on the lower range of mountains and is greatly improved by proper soil and culture. In favored spots it produces a crop for the scythe. It is eminently adapted to our soil and climate; the roots retain their vitality in the dry sandy soil during all the fore part of the season, until the periodical showers come, when a seed stalk is thrown rapidly up, from 6 to 18 inches, bearing one to three small seed heads, standing at right angles to the stalk. There are no blades on the stalks, while the body of the grass is too short for any thing but sheep. This and other grasses are the principal reliance of our stock Summer and Winter. I think the Buffalo grass is, in many respects, superior to the famous blue grass; for winter feeding for sheep it has no equal, always furnishing food when the snow is off or not immoderately deep. It is certainly worth a trial, and if it grows well north and east, would be a valuable acquisition. I have demonstrated its capacity for improvement, and am well satisfied that it is eminently adapted to sandy and dry soils. Here it gets a little snow in Winter, and no rain in Summer, except about 4 weeks. I wish you could see the mutton fattened on this grass; you could form so much better an estimate.

FRUITS.—*Raspberry.*—Mountains and valleys. Chiefly in the mountains, north-hill sides and burned districts. Berry red, juicy, good size, sometimes quite large, flavor excellent, prolific, continuing in bearing 5 or 6 weeks, 6 to 18 inches high, improved by culture,—excellent fruit, worthy of adoption. Will send you some berries if possible.* A superb wine is made from them. In the natural state they yield immensely.

Currants.—Black, Yellow and Red. The red is sweet—small—growing in the mountains, prolific, but of doubtful utility. Black and Yellow, large, thick skin, slightly astringent and very sour until fully ripe—about equal size, large berry, prolific, greatly improved by culture, and pleasant when fully ripe. I esteem the black best, and consider them superior to any of the cultivated varieties. But few are allowed to mature, as our people are crazy after fruits in the Summer. The specimens I send are from a stunted bush in dry ground.† The bushes frequently grow 6 to 8 feet high, and furnish fruit 5 to 6 weeks. A valuable acquisition. I may add here that all native products are hardy.

Cherry.—Commonly called Choke Cherry, but really a pleasant fruit when ripe; free from insects, size of large wild cherry, black, heart-shaped, bushes 10 inches to 10 feet high, prolific, and really more pleasant than the morello. Only valuable in the East as a curiosity.

Gooseberries.—Abundant, small, acid, black of no account. Our climate is admirably adapted to gooseberries. No mildew here.

Plums.—Some pretty good ones. Trees small, poor bearers, useless except here.

Thorn Apple—small, no account. *Hedge Thorn*—A splendid specimen of thorn bush, hardy, excellent for hedges.

Our fruits commence ripening in the lowlands first, and proceed gradually to ripen up into the mountains until cold weather stops the process. We have as yet none of the yellow cucumber bugs—the first season there were no small black turnip bugs, but last season they consumed every thing in their line.

We are sometimes troubled with grasshoppers too numerous to count; last season they could be gathered by the barrel. But these annoyances happen also in other countries. All we want is the general culture of staple products to reduce the price of living, and justify the application of labor to the working of the immense "placer diggings," to make this one of the richest mining countries in the world. We may yet attain this reputation with our present high prices for food, as new discoveries of leads and gulch diggings are made all the year through; this year promises better in every department of mining than any former year. At present all our gulch mining is done on separate claims, at great disadvantage. But we have organized one joint stock company which will demonstrate the practicability and economy of wholesale mining, and a new era in the product of gulches.

J. B. WOLLF.

* Berries received, flavor good, but in the transportation, converted into "jam."

† The currants arrived in good order, and are as represented.

Sandwich Island Correspondence—II.

HAIKU SUGAR PLANTATION.

MAKAWAO, *Honolulu Islands, 4th month, 15th*, 1862.

Increased attention is of late being given to the culture of the sugar-cane upon these islands. The soil and climate are well adapted to its culture, and since the trouble in the sugar-producing regions of the United States has laid an embargo upon their products, new fields are sought, and it would not be surprising if some of these islands should yet produce a large amount of sugar for export. In a recent visit to the Haiku Sugar Plantation, under the charge of G. Beckwith, from Massachusetts, I was shown over the place, and through the buildings for manufacturing the cane into sugar. The mill and boilers are new, of approved patterns, and capable of turning out about 4,800 pounds of sugar daily. The refuse cane, or bagasse, passes from the mill to the furnace, and forms nearly three-fourths of the fuel used. The plantation embraces about 7,000 acres, only 700 acres of which are now in cane. Nearly all of the work on the plantation and in the mill is performed by natives, under the charge of overseers. The laborers receive $6 to $8 per month, including their board. The sugar is put into half barrels or kegs, holding about 112 pounds each. The kegs themselves, or the prepared materials from which they are set up, are manufactured in New-England, and shipped here in bundles or shooks. The mill is near the shore, upon the bay of Mariko, where small vessels take the sugar on board for Honolulu, to be subsequently shipped to California and Oregon.

Besides the Haiku plantation, there are three others on the island of East Maui, whilst many cultivators raise small patches of one-half acre to three or four acres of cane, and take it to the plantation mills for manufacture. The yield is from one to three tuns of sugar per acre, the wholesale price of which is 6c. to 8c. per pound.

JOEL BEAN.

The Raspberry.

The season of bearing, now nearly or quite over, is a time when the canes are apt to be left to take care of themselves. It is not easy to realize that the grass and weeds that are allowed to spring up between the rows will injure the crop for next year. These should be kept down by frequent hoeing or raking, and if the canes are not vigorous, manure should be applied, either as a surface dressing or in the liquid form. The plants, however, should not be stimulated later than the first of September, as it is highly important that growth should cease and that the wood may be well ripened, whether the canes remain above ground, or are slightly covered.

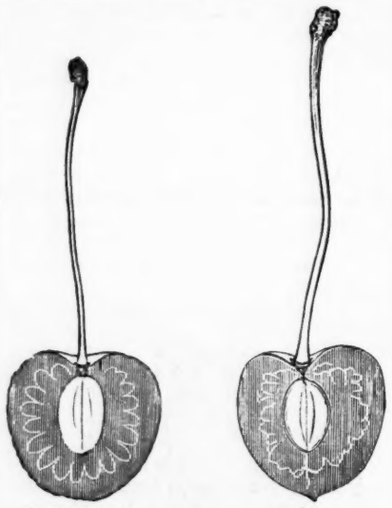
The finest varieties of this fruit in general cultivation are the red and white Antwerp, Fastolf, Orange, Cushing, French and Franconia. These are good enough in some localities, especially in the valley of the Hudson, and if they did as well every where as in favored localities, nothing more perhaps could be desired. But the raspberry is not so easily suited with soil and climate as the strawberry and blackberry. Very little has been done to improve this fruit, until quite recently, and for eight of the thirty four varieties in Downing's list we are indebted to Dr. Brinckle of Philadelphia. It is altogether probable that new varieties are yet to be originated, better adapted to their native localities than any thing we now have. This is a very promising field for amateurs.

The production of new varieties is not difficult. The birds are helping in this work, and it is not infrequent that new seedlings are found in gardens that can be traced to no other origin. If these chance plants that spring up by the fence, or in secluded spots in the garden, were oftener saved, we should have a much larger list. We are indebted to a chance seedling for the best berry upon our own premises.

The raspberry delights in a moist vegetable loam, deep and rich. Its native locality is upon hills and mountains, growing abundantly in ravines where there are large collections of leaves. Wherever the forest is cleared up, the raspberry soon makes its appearance and often covers the land. The whole Green Mountain region is so abundantly stocked with this fruit, and the wild fruit is so fine, that it is undoubtedly a hinderance to their cultivation in gardens. That is the best variety for you which will do best in your garden, whatever the books may say. As a special manure for this plant nothing can be better than the soap-suds made in the family. For methods of training, laying down, etc., see June number.

Cherries.

We are in no danger of over-estimating this delicious summer fruit, coming as it does in the heat of Summer, tempting us with an infinite variety, both in form, size, and flavor, hardy beyond any other kind of stone fruits, and adapted equally for the dessert and culinary purposes. We seldom give consideration enough to the value of the cherry as an ornamental tree, and in a selection of varieties this is most important, at least so far as to enable us to place the ornamental varieties where they will most adorn our grounds and gratify good taste. The Black Tartarian, one of the finest of the black hearts, is pre-eminent for the beauty of its foliage and habit. In the classification of cherries there is considerable difficulty, the various groups run so imperceptibly into one another. At first it was easy to see four groups: Hearts, Bigarreaus, Dukes, and Morellos. We now see in the newer varieties the hard-fleshed Bigarreaus gradually shading off to half-tender and



Black Tartarian. Elton.

tender-fleshed Hearts, and those otherwise of the Heart character possessing peculiarities of the Bigarreaus. So, too, the sweet Dukes and sour Morellos—very similar in the rounded habit of the trees, and in bearing fruit on both the old and new wood—blend by almost imperceptible approximations, but the character of sweetness or sourness remains as a convenient distinction. These groups, Dukes and Morellos, are by far the hardiest of the species, flourishing both at the north and south where the others fail.

Early Purple Guigne.

We may take the *Black Tartarian* as a sample of the Heart cherries. We give a cut of it with the more pleasure, because it stands so high in public favor, and is so worthy of cultivation for its many excellences. We have specified the beauty of the tree. The fruit is very large, with an angular or uneven surface, the skin of a brilliant black, or purplish black color, the flesh purple, half tender, and very juicy, bearing transportation perfectly; the flavor rich and sprightly. It ripens among the earliest black cherries.

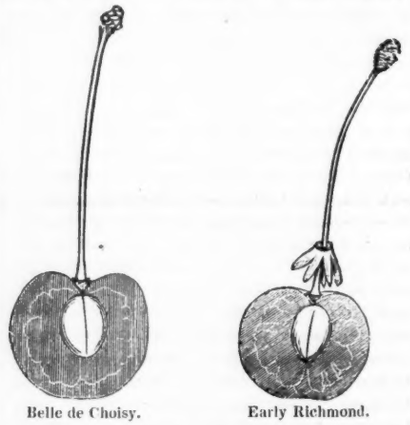
The *Elton* fairly represents the Bigarreaus, and is an exceedingly fine fruit, ripening nearly as early as the preceding. The fruit is large, yellow in the shade, but beautifully mottled with colors on the side exposed to the light; of a pointed heart-shape; flesh yellowish, firm, but when fully ripe, tender and juicy, with a sweet and very rich and agreeable flavor. The tree is a vigorous grower, somewhat drooping in habit.

The *Early Purple Guigne*, (pronounced geen), is the earliest of cherries, ripening in this latitude about the first of June in some localities. The tree has little beauty, but by pruning while young, may be made to take a pretty good shape. The fruit is early and excellent, heart-shaped, color dark purple when ripe, flesh dark, juicy, sweet, and well flavored. The stem is very long, and inserted in a narrow basin. This is found to be a favorite variety at the West.

The *Belle de Choisy* is a very delicious cherry, and a pretty fair example of the Dukes, the tree having the low, round-topped habit of this group, and the fruit the round and slightly depressed form. Skin thin, yellow, and mottled with pink, or red, on the exposed side. Flesh amber-colored, stained with pink; sweet subacid, rich. It ripens about the first of July.

Morellos.—As a type of the Morellos, or pie cherries, we give the Early Richmond. The tree is round-topped and spreading, and very productive; the fruit of medium size, round, borne in pairs, the calyx usually adhering around the short stem. Skin red, becoming dark-brown if it hangs long. Flesh reddish, juicy, very sour, but of an agreeable flavor. The fruit remains on the tree ripe during the entire month of June, and even later. It is an invaluable fruit in every garden for culinary uses.

We have here given a few of the most desirable sorts of cherries of quite distinct characteristics—there are others which should be added to a list of trees to plant. One of the great charms of the fruit is the variety which we may easily possess. In addition to those already



Belle de Choisy. Early Richmond.

named, we add: Belle d'Orleans, Gov. Wood, Coe's Transparent, Bigarreau, and Great Bigarreau, Black Eagle, Downer's Late, and Carnation.

The Currant.

This is the fruit of all others for dog-days. Most people have a very strong craving for its acid, and this, perhaps, is a good indication that it meets some want in the system. "Souring the crop" is the very expressive term by which the farmer boys indicate a feast of this fruit. It should be provided by every one who has room to grow the bushes. It is more hardy than almost any other of our fruit-bearing shrubs, bears fair crops without much coaxing, and is, with generous treatment, loaded every year.

There are some twenty five varieties in cultivation, each good for some particular qualities. But most of them are little if any better than the old red and white Dutch so widely known, so that he who has these may well be content. La Versailles has large, long bunches, and is among the best of the new varieties. The Cherry currant is distinguished for its size, and its acidity. It is not so generally known as it should be, that this shrub rejoices in a rich clay loam. Where it does not flourish, clay would make a good amendment to the soil. The fruit

can be increased in size and quality, by training upon wires or as a tree, but it does so well in its natural bushy form, that few will be at the pains to change it. Currants are frequently grown by the acre for market, and the results compare favorably with those of the other small fruits.

Strawberry Farming.

It is only within a few years that the cultivation of the small fruits on a large scale for market has been much pursued in this country. Now, however, strawberries, currants, blackberries, raspberries and cranberries, are cultivated in plots of many acres in extent, and ordinarily realizing to their owners great profits compared with the investment in land, labor, etc. At the recent strawberry show at the office of the *American Agriculturist*, among the berries showing the best cultivation, were some splendid Triomphe's and Wilson's, from Rev. L. M. Pease, of the New-York Farm School, near Mt. Vernon, Westchester Co. This farm we visited, and it has many points of interest besides the strawberries.

Mr. Pease is widely known for his beneficent and successful exertions in behalf of poor children of this City, he having given the character to the Five Points Mission, and House of Industry, which he may almost be said to have founded. Seeing the need of giving poor children a means of *earning* a respectable livelihood, he some years since purchased this farm and turned it over to the "House of Industry," when that body was incorporated, by which institution it is now leased to a Board of seven Managers of the most prominent benevolent citizens of New-York, of whom Mr. Pease is one. The Farm has been cleared of rocks, bushes, fences and water—the rocks buried and made into drains, the bushes and fences, except the stone walls, burned, the water gathered into pools at different levels to serve as reservoirs for irrigation. This he is preparing to conduct on an extensive scale, and now uses the water with marked advantage in some extensive strawberry beds. On this farm, in connection with other ordinary farm crops—corn, potatoes, rye, oats and grass—there are some five acres of strawberries in bearing and several more which will come into bearing next year. The varieties are chiefly Wilson's Albany and Triomphe de Gand. We estimated the yield at about 300 bushels to the acre, and Mr. Pease thinks that certain parts will yield at the rate of 400 bushels of Wilson's Albany.

The culture of these strawberries, except the preliminary preparation of the ground which is very thorough, is done entirely by boys from 12 to 15 years old, and we have never seen strawberry beds cleaner or more flourishing, and we may add, we never saw such a profusion of fruit of a uniform, large, or above medium size. On a single plant 2 years old, taken at random, we counted more than 200 berries, green and ripe. In general, they are planted 14 inches apart with 18 inches space between the rows. Grass and other farm crops showed excellent culture and looked finely. Mr. Pease uses an abundance of manure both from the stall and compost heap, and besides purchases fertilizers. He says he can not afford to farm without plenty of manure, and if he can not make all he wants he must buy it.

The boys are encouraged to dilligence by certain privileges and payments depending upon their steadiness and efforts. They each have garden patches to cultivate of their own, according to their own tastes. One is trying for the big squash or pumpkin premium at our proposed pumpkin show. Others have constructed unaided a small "green-house," where we found a moist atmosphere and the conditions of rapid growth; but it is too small and will be too much exposed to bear the winter. It would have been better on the south side of a big rock or half buried up in the ground. Happier, pleasanter boys we never saw. They are in a fair way to make good farmers and gardeners. Snatched from surroundings which are the most debasing in this hot-bed of iniquity, (New-York City,) they are saved to themselves and to society. The number on the farm will be increased as fast as work can be provided. A fine new barn has been built, and other buildings are in contemplation.

Fruit Picking.

It is a great art to get a bushel of apples or choice pears from the tree into the basket without brusing one. They may be picked by hand, placed in a bag or basket, and transferred afterward, when the picker comes down from the tree, into the barrel or large basket. *We* very much prefer to have a smart, active boy or two on the ground beneath the tree, or out a little on one side, to catch the fruit as fast as we pick it. This gives the picker both hands, and ability to draw in limbs and pick without jarring, and to take ripe or partially ripe fruit at pleasure. The fruit sustains no injury, if caught, and as it is placed in the basket or barrel, one or two at a time, this is all the handling required. It has no fall, even from a very small hight, and is absolutely unbruised.

Fruit Pickers, however, are of use, and a good one is of great value. There are trees we can not climb into, and others, the limbs of which can not be brought within reach, so it becomes necessary or desirable, to have a means of picking attached to a long pole. One of the best of these contrivances, whose name is *legion*, is the one illustrated above. It is Goodwin's patent, and consists of a light, cast-iron frame, *B*, (bad if it were to drop and hit a stone,) upon one side of which a bag, to hold the fruit when picked, is attached. An interior part of the frame contracts the opening at either end, and conducts the stem of the apple or pear against a knife-blade *c*, which is intended to cut the stem; if the turning of the picker does not cause the fruit to drop. This will ordinarily occur; and it will be noticed, that a very good leverage to pick the fruit is obtained. The cost of the implement, we believe, is 50 cents.

Packing Fruit for Transportation.

Persons often wish to send packages of nice fruit to distant friends, yet fear it will not reach its destination without being badly bruised in the transit. There need be little fear of this, now that modes of packing are so nearly perfect, and express companies carry and deliver parcels with such care and dispatch. Among the ways of packing, here is one: Prepare a box of suitable size, and provide a quantity of cotton wadding, and several sheets of tissue-paper. Put two layers of cotton on the bottom of the box. Wrap each specimen—be it peach, pear, plum, grape-cluster, or other fruit—in tissue-paper, and lay it on the cotton. If trouble is taken to tuck a bit of cotton between each specimen, it will be all the better. Over the first layer of fruit, place a sheet of wadding, and proceed as before until the box is full: then finish off with a layer of cotton moderately pressed down, to keep the fruit from shaking about. Nail on the cover firmly, and dispatch box to place of destination. The aroma, and even the very bloom of the fruit, will be mostly preserved. Some persons use sweet bran, in place of the cotton, and with excellent success.

What to do with Summer Fruit.

Much Summer fruit is very transient, decaying even before it falls from the tree, and sometimes even before it is ripe. This is true of many pears. Picked, or shaken from the tree and picked over, they make excellent *perry*, which is like cider, but more delicate and wine-like. It needs a cool cellar to undergo its fermentation in. Apples should be made into cider. Sweet, it brings a high price in market, and is a delightful cooling beverage, but does not make so good cider as later, when fermentation is less rapid. The small hand mills and presses are very good for pressing fruits, and a family may supply itself with the juices for preservation, and considerable quantities for sale.

Cockroaches and Croton-bugs.

An Entomological correspondent of the *Agriculturist* to whom we asked some questions about these creatures, writes: "It is a comfort to us in considering these nuisances to think that neither of them originated in this country—the cockroach (*Blatta orientalis*) being a native of India, and thence carried all over the world by the aid of commerce, and the croton-bug (*Blatta* (Ectobius) *germanica*), originating in Europe. The croton-bug seems to thrive better in this country than at home, for in our large cities it is found in millions, really taking the place of the prevalent cockroach in many localities. European writers, as far as I have seen, speak of it as not very abundant. We have several indigenous species of Blatta, but, like the aboriginals, they seem to choose the freedom of the woods and fields.

"The cockroach is larger than the croton-bug, the former varying from 8 to 14 lines, and the latter 5 to 10 lines in length. The first is of a rusty brown color—the head with a white dot on each side between the eyes—the wing covers abbre-

viated and truncated at the end in the male, and only rudimentary in the female. The second is a livid yellow color, very glossy, with black antennæ and eyes, and two parallel longitudinal black lines on the shoulders. It seems to take to water pipes rather more naturally than the former. Otherwise their habits are very much alike, both species being fleet-footed, restless and sneaking—having insatiable appetites—not being at all particular as to their diet, 'lovers of darkness rather than light,' fond of grand pow-wows on kitchen floors, and breeding by the hundred thousand. True Ishmaelites, 'their hand is against every man.'

"In New-Orleans I have found domesticated another (tropical) species, which does not yet seem to have a strong foothold in New-York, the *Blatta gigantea*, which is of a livid color, with a large quadrate blackish spot on the thorax. This grows to be over two inches in length, and is the kind about which mariners are wont to discourse. In this climate we have very little idea of the way in which they increase and swarm in the tropics, both on sea and land. On the land nature has provided many destroyers which keep down the surplus stock, such as ants, spiders, and many of the smaller animals. On shipboard, it becomes necessary now and then for every person to come upon the deck, or to go on shore, and to make an intense smoke between decks and in the hold, which kills every living thing within its reach." N.

However interesting the facts about the vermin, as regards their origin, etc., are, there is another class of facts which interests us still more, namely, how to get rid of them. We must, however, beg our readers to bear in mind that where filth, decaying matter, and such like things exist, it is far better that it should be converted into living organisms than remain to foul the earth and air, and pollute the dwellings of men; so by a providential ordering of things, there are insect scavengers provided, which multiply in proportion to the abundance of food they have, and which render innoxious vast quantities of matter which otherwise would be productive of disease and death incalculable. We may regard them then as good friends, though sometimes disagreeably familiar, and uncomfortably numerous. A house infested with roaches or croton-bugs, may be effectually cleared of them by exposing it throughout to a freezing temperature, which is easily done in houses standing isolated, the family leaving it for a few days in cold winter weather, allowing the fires to go out, and giving free ventilation. This is impracticable in cities, and often in the country, where this nuisance is spreading quite rapidly, brought in flour barrels, and provision cases of various sorts. Probably the next best remedy is what is known among housewives as "dry *green paint*," to painters as "*Paris green*." This is arsenite of copper, an exceedingly poisonous substance, of a bright green color. The color is a great safeguard against its accidentally contaminating any thing eatable—which is the great danger with white arsenic, and the poison is so subtile that it affects the insects without their eating it, when dusted about in their runs, in cracks of the wainscoting and floors, around water-pipes, etc. This poison should be used in no larger quantities than absolutely necessary, for when considerable quantities are about the house, especially if it is near warm flues, or hot water pipes, it might affect the atmosphere so as to be injurious. The air of rooms painted or green-washed with it, or covered with paper on which this was the coloring matter, has, in repeated instances, proved highly poisonous and even fatal. There is also an article very generally for sale over the country, as a rat-poison, the basis of which is phosphorus, rendered sweet and palatable, which these insects will eat, and which is certain death; but we place most reliance on the green paint, for this is lasting. It destroys also other insects.

Chloride of Lime.

It is not generally known that the smell of chloride of lime is particularly offensive to many kinds of animals, especially to the common fly, the gadfly, and stinging flies of all descriptions, so obnoxious in stables. A sure means to get rid of these troublesome visitors is to place a vessel filled with chloride of lime upon a shelf, or a board suspended to the ceiling. This being done in the evening, and a window left partly open as an outlet for the flies, none, or very few, will be found in the room in the morning. The smell of chloride is by no means injurious to man or beast; on the contrary it is wholesome as an absorbent of deleterious miasms pervading the air. It need hardly be recommended to repeat the expedient at short intervals, say at least once a week, the more so as it will cost but a trifle and will give no trouble.

In a room—kitchen, pantry or cellar—where chloride of lime is kept, mice and rats will keep off, as indeed they will from any place where the article is used. We have seen the experiment tried very successfully in a large Inn at Nuremberg, long infested with rats and mice, all of which disappeared almost suddenly, not only from the house and outer buildings, but also from the stables and yard.

The use of chloride of lime is not less efficacious for preserving plants from ants, caterpillars and other insects. We have a cabbage field cleared of this nuisance by the simple process of sprinkling the plants with a solution of chloride and water; which may be done by using a common hand broom or a paint brush. To our certain knowledge, a piece of ground sown with white cabbage was thus thoroughly preserved from insects, while in the neighboring pieces the plants were actually destroyed by them.

The same remedy is also applicable to fruit trees which may be preserved or purged from caterpillars, etc., by mixing a pound of chloride of lime with half a pound of lard; this will form a kind of paste, which should be wrapped in tar, and tied to the stem or to the thicker branches of the tree. All insects will drop off almost instantaneously, nor will any be tempted to crawl up again. Even sparrows will keep away if the leaves have been sprinkled as aforesaid.

Experiments are being made as to the efficacy of chloride of lime compared with sulphur as a remedy for the vine disease, and the destruction of the *aphis* or vine-fretter.—*Deutscher Telegraph.*

Material for Pickles.

There is a prejudice against pickles, perhaps it is because boarding-school girls of a sickly hue, are said to dispose of marvellous quantities of them. Whatever the prejudice, it is not well founded. It is a blessed discovery that salt and vinegar will carry over something of the greenness of Summer into the barren Winter. Almost any vegetable preserved in good cider vinegar, (not dilute sulphuric acid,) is a healthful condiment, and aids digestion. There is nothing better than the cucumber, and the vines are full of these now. Pick them while small, and preserve in strong brine. Cabbage makes a good pickle, but we can keep this fresh through the winter, and use raw, which is better. Peppers, the thick-skinned squash variety, are almost indispensable in the pickle jar. We would suggest onions, were not the prejudice against and the love for this Egyptian esculent universal. Then come mangoes, prepared from green fleshed melons, well stuffed with cabbage, horse-radish, nasturtiums, white mustard and spices. This suits us a shade better than cucumbers. Beans in the pod, peaches not quite ripe, butternuts and hickory nuts, in the very green state—and last, but not least, tomatoes make good pickles. This list is extended by other recipes in this number; but these will enable the thrifty housewife to fill the pickle barrel.

String Beans and Green Corn in Brine.

It is not generally known that string beans can be kept in salt, the same as cucumbers. When of suitable size for cooking, pick and string them, and break in small pieces, as for ordinary boiling, and pack in firkins or stone jars, using a layer of salt, two inches in depth of beans, more salt, and so on until the vessel is filled, covering with a good coating of salt. Over this place a board cover, kept down by a stone or other weight. The salt soon extracts sufficient water from the beans to cover the whole with brine, in which condition they will keep for a year, if required. To prepare them for cooking, soak in water over night, and if too salt freshen in more water before boiling. Green corn ears may also be preserved in salt, and when required for use, soak till freshened, and boil.

Cucumbers, for pickles, may be put in with the beans, thus saving an extra firkin; as they are pickled in precisely the same manner, freshening in water, and putting in vinegar, with or without spices before using.

Various Recipes.

Tomato Catsup.—Select well-ripened, smooth tomatoes, boil with a very little water until tender, remove the skin, and rub the contents through a fine wire seive to separate the seeds. To each bushel of the fruit add 2 quarts cider vinegar, 2 lbs. salt, ¼ lb. black and 2 oz. Cayenne pepper, 3 grated nutmegs, ¼ lb. allspice, 6 finely chopped onions, and 3 lbs. brown sugar; boil the whole for 1 hour, stirring it frequently, and strain again through the wire seive. When cold, bottle and set away in a cool place. It is ready for immediate use, or it may be kept a year.

Sweet Pickled Quinces.—The most common use of quinces is as sweet preserves. They also answer a good purpose when sliced up and mixed in small quantities with apple-sauce, giving the whole a pleasant, aromatic flavor. They make a good pickle, also. Boil in vinegar with sugar, and add cloves, cinnamon, etc., to suit the taste. The best way is to pare and quarter them and cut out the cores. Boil 10 pounds of fruit, adding 5 pounds of sugar, and about 4 pints vinegar, one ounce of stick cinnamon, and ½ ounce of cloves. When well boiled, put in a jar and pour over the syrup.

Baked Quinces.—This fruit may be baked like apples, adding syrup, or sugar and water, while baking. Certainly every one who likes a sour baked apple, will relish a baked quince. They are very good simply baked, and eaten with powdered sugar.

To Dry Sweet Apples.—Bake as for the table, then dry in a brick oven. They may be soaked, heated, water dried away, and restored very nearly to the condition of a fresh baked apple. Stewed in more syrup, they make a much richer sauce than the common dried apples.

Peach Jelly.—Pare well-ripened peaches and remove the pits; boil the fruit until quite soft in water enough to cover it; strain through a coarse bag and add 1 lb. white sugar to each quart of the liquid, boiling down until upon trial it stiffens when cooled. If it does not stiffen sufficiently, add a little isinglass. Put in jelly glasses, tumblers or bowls, and paste white paper over them. After setting a short time in the sun, preserve in a cool, dark place.

Blackberry Jam.—Blackberries, in almost any form, and wine made from them, are very pleasant and wholesome, and besides are conceded to be good medicine for the "Summer complaint," and housewives and nurses look out for a good stock of blackberry jam. It is easily made, and there is no difficulty in keeping it. To each pound

of ripe fruit, stewed in a porcelain kettle for five minutes, add 1 lb. light brown sugar, and mash the contents fine with a strong iron or wooden spoon while still upon the fire. When well mixed and boiled 15 minutes longer, stirring it well in the mean time, fill the jars or glasses, and set away.

For the American Agriculturist.

The Farmer's Lot.

What joy the farmer finds!
He views green acres around him lie
Broadly beneath the open sky,
And not a fetter binds
His free and stalwart frame.

No blush or tinge of shame
E'er rested on that cheek of thine,
Or any angry flush of wine,
That sets the blood on flame,
Strong reaper of the grain!

Thy limbs are free from pain,
And thine are sinews stout as steel,
Which, while they keenly feel,
All their young strength retain,
Because thou art a man,

Created on God's plan;
And, like a denizen of air
Living, that chainless joy to share,
Which in those days began,
When Adam trod the ground,—

That sacred soil he found,
So beautiful from God's own hand,
That lovely, green, unwounded land,—
By full fruition crowned.
Blest is the farmer's toil!

He cultivates the soil,
And lives contented with his lot,
Cast in one dear, delightful spot,
Far from the world's turmoil—
And him no avarice binds.

Such joy the farmer finds;
And he will find it to the last,
Till life and all its cares be past,
Its healthful labor done,
And rest immortal won.

Fort Washington, July 7, 1862. PARK BENJAMIN.

The Editor with his Young Readers.

A LETTER FROM MR. JUDD, NOW IN ENGLAND.

LONDON, England, July 1862.

DEAR YOUNG READERS:—When I left home the last of May, I did not intend to write anything for the *Agriculturist*. All my friends thought that I had worked steadily so long that I *must* lay down the pen and rest my brain a little while. I also wanted to devote sometime entirely to gathering information that might be useful in furnishing matter for the paper hereafter. But it seems so long since I addressed you that I shall venture to break over the "rules" and have a little chat with you....I have seen so much to talk about that I know not where to begin.—Perhaps a few items, gathered here and there, may interest you.—The passage across the Atlantic, in the Great Eastern, was very pleasant. The great ship was itself a constant wonder. In length it will more than reach across a square field of 10 acres. We very frequently took a walk of over a mile by going only four times around the deck. The ship is so wide that three barns or houses each 40 feet long can be set end to end across its middle. With our SMALL load of about 1000 persons, 3000 *tuns* of wheat, 2000 *tuns* of butter, cheese, etc., and 4000 *tuns* of coal, the vessel sunk into the water about 26 feet, leaving 28 feet of her hight still above the water. She would float with the weight of more than 250,000 men on board. Yet, great as is this vessel, with all the weight of the iron of which she is built, of her mammoth engines and other apparatus, she moved along through the water at the rate of 350 to 400 miles a day, (almost as fast as a railway car), and yet as easily and gracefully as a swimming duck or swan. The paddle wheels on the sides, and the screw propeller underneath, never stopped an instant in 9½ days, from Sandy Hook bar New-York, to "Bell Buoy," off Liverpool. When the wind blew hardest against the sails, we could scarcely feel any motion. When there was little wind, the great ocean waves coming *across* our path would gently roll the ship from side to side. Standing on the side then was like being on the end of a see-saw plank, a-going gently up and down once in 10 to 12 seconds. We did not enjoy . e supposed good medicinal effects of sea-sickness...."he first three days nothing but water and fog could be seen. Then we crossed the south point of the "Newfoundland Banks." These do not come very near the surface, so that vessels go right on them. At one place we saw nearly 50 vessels catching codfish with long lines let down to the deep banks.—The first day we went directly east from New-York or Sandy Hook; the second and third a little north of east, and the next a little more northward, to latitude 45°, and longitude 45°, after which we steered straight to the south point of Ireland (Cape Clear), which was the first land seen in 8¼ days. It took another day to go up the Irish Sea or Channel, between Ireland and the West Coast of Wales and North England. It may interest you to take down your maps and trace out a ship's course across the ocean. Most steamships go a little further north, crossing over the northern part of the great Newfoundland Banks, and passing near Cape Race. We kept a little further south, because in early Summer icebergs, that is, great mountains of ice, come floating down from the North, and ships sometimes strike against these in a thick fog. This is about the only danger in crossing the Atlantic in a good ship during Summer. You will see that when in latitude and longitude 45°, we were only 15 degrees south of Greenland. Even in June the winds came down from the north as cold as a January blast in New-York. We had to put on two sets of flannel, as well as overcoats and shawls to keep warm when walking on deck. During the passage we had meetings, singing concerts, discussions, mock trials, etc., and the time passed rapidly and pleasantly away. There was something very grand in looking out upon the ocean, that seemed to meet the sky all around; and to reflect that the expanse of water was so great that, though moving over nearly 400 miles of it daily, no land was in sight for more than a whole week. What must be the great Pacific ocean! Nearly a thousand ships ply between New-York and Great Britain, yet there was so much room for each that we saw only five or six of them in our whole trip! As we went up the Mersey River to Liverpool, there was a fine spectacle. Thousands of people came out in steamboats, with flags flying and bands playing, to welcome the Leviathan ship, while for many miles both banks of the river were crowded with tens of thousands of people waving their hats and handkerchiefs, and cheering as we passed. The ships in the river "manned their yards," that is, all the sailors climbed up the ropes, and on to the masts and yards, or cross beams—looking at a little distance like flocks of huge birds in the rigging. Such was our welcome to the Old World.

LIVERPOOL is a pretty large city, containing nearly 400,000 inhabitants. It is 206 miles, by railroad, northwest from London. It is a great seaport, receiving and sending out more than $300,000,000 worth of merchandise every year. It is more closely connected with America than any other city of Europe, over one-third of all its trade being with New-York City. The "Docks" of Liverpool are noted. The tide rises and falls 20 to 30 feet in the river. The chief docks resemble Canal Locks; that is, they are great stone basins or channels, into which ships are floated at high water, and then the gates are shut so that when the tide falls the ships remain floating in the water retained by the gates. At a little distance, the long rows of ships look as if bedded in the soil. When unloaded, and loaded again, the gates are opened at high water, and the vessels are floated out into the river. When they wish to examine or repair the bottom of a vessel, they have only to let the water off through trap doors, as the tide falls, and the vessel is left high and dry. The gates and traps being then closed, the water does not flow in at the next rise of the tide. I shall not have room to tell you more about this city, and can give only a few notes about other cities. I went southwest from Liverpool about 100 miles, to Holyhead, passing through the north part of Wales, and on cars through the great Brittania Tubular Bridge. This Bridge is an iron tube 1513 feet long, over the Menai Straits, from Wales to the Island of Anglesey. It is made of wrought iron plates riveted together, and is so strong that a long train of cars passes rapidly through it, 100 feet above the water. Wales is a hilly country; we passed right under several high hills through tunnels, some of them a few rods and some nearly a mile long. The houses are mostly stone, and few of them are more than one story high. I could hardly understand the people at the railway stations, though they talk the English language. They pronounce words differently from us. The fields are all divided by hedges and ditches, with an occasional stone wall. I never before saw so many crows as abounded all along this route. (*Mem.* All through Great Britain, route is pronounced *rute*. They never say rail*road* depot, but rail*way* station. They say coaches or carriages, and not cars. The cars, or coaches, are divided into rooms, with two seats for three persons each, facing each other, so that half must ride backward. A "guard" in uniform, not called a conductor, rides in a forward office or car. Your tickets are shown as you enter a car, you are then locked in, and near the end of the journey the train stops and a station agent comes along, unlocks the car, takes your ticket, and the train runs into the station. There are 1st, 2nd, and 3d class coaches, the 3d class having no cushions, and but poor ones, if any, in the 2nd class. The 3d class fare is about 2 cents a mile; the 2d class 3 to 4 cents, and the 1st class 4c. to 6c. a mile. They have but few 1st class coaches, and these are mainly designed for "Lords" and "Nobles." Americans being all nobleman, and accustomed to good cars at home, generally get in among the "Lords" and "Ladies" of this country.)

Passing by water 60 miles from Holyhead in Anglesey, over to Dublin, Ireland, I spent some time in driving all round the city, but can not stop to describe it. It appears more like New-York than any other town I have seen, except Liverpool, perhaps, though the buildings are mostly built of stone, and the streets narrower, and more broken up and crooked than in New-York.

A ride of about 60 miles through the country from Dublin to Belfast, on the Northeast coast of Ireland, was interesting. The land is mostly owned in large tracts by "nobles" or "lords," and rented out to tenants. The fields are small, and divided by hedges. The country houses are mostly but one low story high, the walls of dried mud, or stone, and covered with thatch, that is a thick layer of straight straw, for a roof. The people appeared contented, but exhibited none of that activity and enterprise manifested in America, where most farmers *own* the land they till. There is considerable hilly and waste, or very poor land. I first saw, here, the digging of turf for fuel. Many women and children (few men) were out cutting up the turf into nice blocks of small size, and piling them up to dry, for burning in the houses. The turf is like the black earth of our swamps, but much more compact or solid. On a single acre there were sometimes 20 to 30 families piling up their heaps.

Approaching Belfast, the great linen town or city, we saw hundreds of acres of grass covered with linen cloth bleaching in the sun. Our finest white linen is woven in the brown state, and bleached afterwards. Flax is largely grown in the neighborhood of Belfast. The manufacturers send it out many miles into the surrounding country to be spun, and much is spun and woven by machinery in the city. I visited one mill where 1,600 men, women, and children were preparing and spinning and weaving flax—people enough for a large village all in one establishment. Much of the linen used in our country comes from Belfast. The great Linen Hall, and the celebrated Ardoyne Mills, where are woven our finest damask table covers, were exceedingly interesting, but it would require too much room to describe them here.

In my next letter I purpose to tell something about Scotland, and the great City of London.

THE STEPPING STONES.—FROM A PAINTING BY J. J. JENKINS, ENTITLED "COME ALONG."

Engraved for the American Agriculturist.

The scene, our young readers will perceive, is one of mountain peasant life. The back ground is charming, the stream widening to a lake, the birds hovering over the quiet waters and the distant mountains. "What a nice place to bathe," we hear some exclaim, and others, "There must be trout in that lake, the waters are so clear." Some will anticipate a little, and think of skating and cutting ice.

But there is something more charming here than the features of the landscape, and even the young folks, who are so full of play, will see it when they look at the faces of the mother and her child. They have been away all day in the grain fields gleaning. The little girl has been helping, and a part of that goodly bundle of wheat is the result of her industry. They are crossing the ford that leads to their home, a place she has been carried over so often, that she thinks she must have help. You see her fear, and the suppressed smile of the mother (whose hands are occupied with the bundle), encouraging her to take the step, and she must help herself or be left behind. The artist has told the story well, and it is for our young readers to apply the moral. —There is a time, but a little while ahead with most of our young readers, when you can not have the help of your parents. They have provided for all your wants, fed you, clothed you, taught you, and done it with so much kindness and apparent pleasure, that you have never suspected how much self-denial and labor were involved in your comfort. You could not live without them, and yet you must soon learn the lesson taught the child in the picture, to *help yourself.*

Parents see and feel this more than you do, and so they lay tasks upon you. Had they always carried you in their arms, you would never have learned to walk. And the habit of self-support, that you are acquiring under the guidance of your parents, will soon enable you to take care of yourselves.

And there are lessons in the picture for our older readers—that mother evidently has confidence that her child will take the steps, and get over safely, and when the little one sees that look of confidence and encouragement in her face, it is worth a thousand warnings to her—she will be as brave and as sure-footed as her mother thinks her. We know of parents who do not expect much of their children. They fret over their short-comings, and have no patience to teach them better. They treat them as if they did not think them capable of doing well, and the result justifies their expectations. If that mother screamed at the child that the water was deep and the rocks slippery, and the current swift, and that she must take care, and acted as if she did not believe she would get over safe, would the little thing have the pluck to venture? Probably not, and if she did she would be very likely to slip.

How powerful is the influence of example. The mother passes on before—the daughter, timorous, yet strong in confidence in the mother, follows on the slippery way across the water. "Come along," the mother says, and so the artist named the picture. Yes, follow thy mother child, in her diligence and frugality, and in all her moral virtues, as well as her sure-footed way across the mountain stream. Be strong to do as she says; be independent to do right, even though unaided and alone. Mothers, so lead your children in safe, right ways, that you can trust them in those things calculated to try their courage and their principles. Then heartily give them that confidence, with your own example, which gives both moral and physical power.

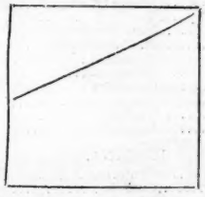
About Kites.

Who ever saw a boy that did not enjoy kite-flying? We never did. It was one of the very pleasantest sports of our boyhood, and we hope all our young readers, particularly the boys, enjoy it too. The kite is a toy which depends upon very philosophical principles. And there is a good deal of skill required to make a good kite and fly it well. This is just the time for kite-flying, for the grass is mown, and the grain is much of it harvested, so that the fields are clear, and there is room enough to raise the kite without doing any injury. A good kite is strong and light—and of such a shape that a great surface is exposed to the wind, in proportion to the amount of wood in the frame. A square kite, or a diamond-shaped one, or a six-cornered one, are each better than a bow-kite, because there is so much wood in the bow, that it is hard to make a bow-kite that will fly well in a light breeze. Whoever makes a kite should take care to make it perfectly symmetrical—that is, just the same on one-half as on the other, just as heavy, and to look the same. Select straight-grained pieces of pine wood, have them of very even size throughout, somewhat flat, and without splits; as light as you think they will do. For a square kite, cross two pieces of equal length at the middle of each. Tie them together with shoemaker's "waxed ends" if you can get them; they will not slip—and it is not best to cut notches or nail them, for this weakens the wood. Then take a stout linen cord, and having notched the sticks on the ends, pass the string around, and tie it as tight as you can and not split or make the sticks bow, and drive a small carpet tack into each end through the string. Next make some paste—which is done thus: Take a tablespoonful of flour, put it in a teacup, and wet it with a little *cold* water, and stir it up till it is as thin and smooth as cream—then stir it slowly into about a teacupful of boiling water in a tin cup, which is kept boiling. This will make a beautiful, smooth, clear paste, and if you stir some fine salt or powdered alum into it, it will keep a long time. When the paste is made, spread a newspaper out on the clean floor, or upon another paper, and lay your kite-frame upon it, then cut the paper about an inch larger all around than the cord. Beginning on one side, spread a thin coat of paste on the edge of the paper, and paste it over the cord; then do the opposite side; then cut the paper at the corners so that it shall fold smooth, and paste the other edges; and finally paste several narrow strips of stout paper across the sticks to keep the paper from tearing off or rattling. Care must be taken to have the paper very smooth and tight, and if the paste is strong, it answers sometimes to dampen the paper slightly but evenly when it is pasted. It will then be tight as a drum-head. To make a diamond-kite, have one stick about ⅝ as long as the other, and let it cross ⅓ from the top of the long one. Otherwise make it like a square kite. A six cornered kite has usually two long sticks of equal length crossed, and one a little shorter, crossing at the same point, which is above the middle of the kite. The prettiest way to arrange them is so as to have the two upper ends of the long sticks, above where they cross, just as long as the ends of the cross-piece, and the distance between the lower ends of the long pieces, not so wide as the cross-piece is long.

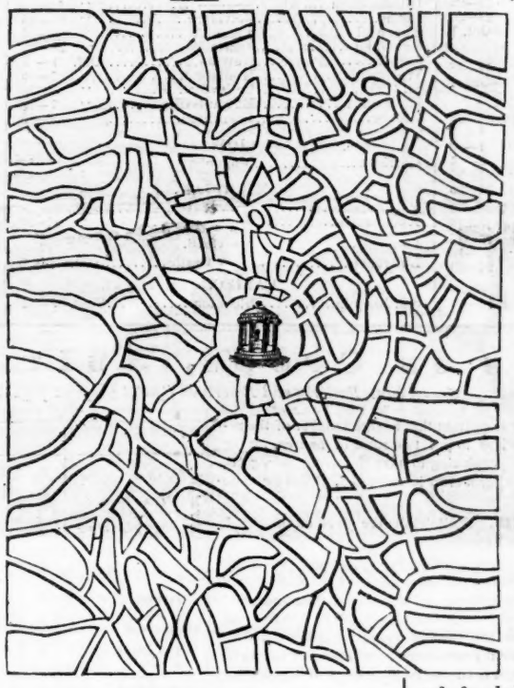
Fasten the line to strings tied to the sticks, going through the paper, so that it may be slipped up and down, and the amount of wind the kite holds may be regulated in this way—the higher it is "hung" the less wind it will hold, but the more it will take to hold it. It must always be hung above the middle, or it will not go up. Woolen list, which may be got at the tailor's for little or nothing, makes the best tails—the length of which must be regulated according to the strength of the wind—and so must the strength of the line also, for a light line will do very well in a nearly still day, but when the wind blows hard, the line must be strong, or the fruits of much labor will be lost. We shall have more to say about kites, and lanterns to send up attached to them, at another time, but now, will only caution you not to make too large ones.

For the Guessers.

Illustrated Rebus.—No. 15.—Above is a Rebus which is a very good one, but it will tax the ingenuity of a very good guesser to solve it. Still some parts of it are very easy, and by patience, we think, it may all be worked out.



Block Puzzle.—No. 16.—Out of 5 squares like this one, which is in two pieces as shown, construct a perfect square.—Contributed to the *American Agriculturist* by Michael Beyerley, Portsmouth, Ohio.



A Labyrinth.

What is a Labyrinth? It is a place where, by means of the complicated character and many intricate windings of the paths, a person is likely to be lost or so bewildered that he can not find his way out or in without some clue. There were some famous underground labyrinths or mazes in olden times—one near lake Mœris in Egypt had about 3,000 separate chambers. Our young readers who have studied English history will remember about the beautiful daughter of Lord Clifford, called fair Rosamond, the favorite of King Kenry II, who built for her a house approached by a Labyrinth, at Woodstock, where she lived, while the jealous Queen Eleanor could not find where she was. Well, we do not think any body knows in what way this labyrinth was constructed; but we have received the accompanying sketch of Fair Rosamond's labyrinth, and though the bower in the center in which she is said to have lived has been changed to a temple of Liberty, we think it will please and perhaps puzzle some of the boys and girls to find their way in without crossing a line.

The Play of the Elements.

This is one of those games which sharpen the wits and promote sociability. It may be familiar to some of our young readers, but probably not to many of them. Our young friends know from what we have told them about elements, that air and earth are not elements at all. Yet the Ancient Philosophers considered them so, stating that there were four elements, fire, air, earth, and water, so these are often called *the elements*. The same game is often played and called "*Fish, flesh, fowl.*"

"Let the company sit in a circle; when all are prepared, the beginner of the proceedings takes a handkerchief, and, looking at some one as if he were about to throw it at him, darts it at another, crying "Air!" or (whatever element he chooses, air, earth or water,) "one, two, three, four, five, six, seven, eight, nine, *ten!*" The other, if he be ready-witted, will answer before the numbers are over, "sparrow," or the name of some other inhabitant of the "element" named; but often when taken by surprise, he will stammer, remain in a state of stupid perplexity, or give the name of a four-footed beast as an inhabitant of the air. If he makes a mistake, he pays a forfeit, but at any rate throws the handkerchief in his turn and soon meets with plenty of companions in misfortune, whose forfeits in a pile on the table must shortly be redeemed. This play creates much amusement, and quickens the wits." Mrs. J. F. Jennings, Brighton, Mich.

The Horse and the Lion.

The following interesting anecdote is from an article which appeared some time since in Blackwood's Magazine: "There were some horses on board belonging to Major Kemball, the Consul General at Bagdad, one of which got loose and leaped overboard just at dawn. The steamer was then about half way to Bagdad, and getting under way, after anchoring as usual for the night. The horse was not missed for half an hour, but was then descried ashore, in what seemed very unpleasant proximity to a splendid lion. The lion circled round and round him, always closing in. The horse remained motionless, beyond turning his head sufficiently to watch the lion's movements. Suddenly the latter gave a tremendous bound, but the horse was too quick for him, and escaped with a slight scratch; but instead of galloping away, he only went a hundred yards, and again stood still. The lion commenced his former tactics with a similar result, only his bound was less vigorous this time. The horse did not even yet take completely to his heels; he seemed either tied by some strange fascination, or inclined to tantalize an enemy from whom a few minutes' canter would have entirely freed him. Again the lion commenced his circles, but ere they were narrowed to springing distance a party had landed from the steamer, and the instant the horse had descried them he came galloping down, while the lion stalked away toward the jungle."

Agricultural Exhibitions for 1862.

STATE FAIRS.

Name.	*Where held.*	*Date.*
Great National Horse Fair	Williamsport, Pa.	Sept. 2— 5
World's Horse Fair	Chicago, Ill.	" 2—16
Wisconsin Agr. & Mech	Milwaukee	" 9—12
Vermont	Rutland	" 9—12
Ohio	Cleveland	" 16—19
Kentucky	Louisville	" 16—20
Canada East	Sherbrooke	" 17—19
American Pomological Soc	Boston, Mass.	" 17—
Michigan	Detroit	" 23—26
Illinois	Peoria	Sept. 29—Oct. 4
New-York	Rochester	" 30 " 3
Iowa	Dubuque	" 30 " 3
Pennsylvania	Norristown	" 30 " 3
Indiana	Indianapolis	" 30 " 3
New-Jersey	Newton	" 30 " 3
Connecticut	Hartford	Oct. 7—10

COUNTY FAIRS.

MAINE.

North Waldo	Unity Village	Oct. 15—16

NEW-HAMPSHIRE.

Merrimack River	Nashua	Sept. 17—18

CONNECTICUT.

Fairfield	Norwalk	Sept. 23—26
Middlesex	Middletown	Oct. 1— 3

VERMONT.

Franklin	Fairfield	" 24—25

NEW-YORK.

Broome	Binghampton	Sept. 9—12
Chautauqua	Panama	" 10—12
Tonawanda Valley	Attica	" 12—13
Delaware	Franklin	" 17—19
Queens	Newtown	" 18—19
Susquehannah Valley	Unadilla (Otsego Co)	" 23—24
Cattaraugus	Olean	" 23—25
Ulster	Kingston	" 23—25
Chautauqua (Union)	Fredonia	" 24—26
Tompkins	Ithaca	" 24—26
Livingston	Geneseo	" 25—26
Washington	Salem	Sept. 30—Oct. 1

NEW-JERSEY.

Monmouth	Freehold	Sept. 17—18
Burlington	Mount Holly	Sept. 30—Oct. 1

PENNSYLVANIA.

Washington	Washington	Sept. 24—26
Lawrence	New Castle	" 1— 3
Snyder	Middlebury	" 1— 3
Chester	Westchester	" 3— 4
Bucks	Newtown	" 24—25
Susquehanna	Montrose	" 24—25

WISCONSIN.

Racine	Union Grove	Sept. 16—18
Green Lake	Berlin	" 17—18
Sheboygan	Sheboygan Falls	" 17—18
Columbia	Portage	" 24—26

KENTUCKY.

Boyd	Ashland	Sept. 16—18

OHIO.

Cuyahoga	Cleveland	Sept. 2— 5
Fayette	Washington C. H.	" 3— 5
Coshocton	Coshocton	" 8—10
Franklin	Columbus	" 9—12
Medina	Medina	" 9—12
Clinton	Wilmington	" 10—12
Defiance	Defiance	" 10—12
Pickaway	Circleville	" 10—12
Carroll	Carrollton	" 14—16
Columbiana	New-Lisbon	" 23—25
Clermont	Bantam	" 23—26
Huron	Milan	" 24—26
Knox	Mount Vernon	" 24—26
Ashtabula	Jefferson	" 24—26
Miami	Troy	" 24—26
Portage	Ravenna	Sept. 30—Oct. 2
Lake	Painesville	" 30 " 2
Shelby	Sidney	" 30 " 3
Lorain	Elyria	" 30 " 3
Champaign	Urbana	Oct. 1— 3
Hardin	Kenton	" 1— 3
Harrison	Cadiz	" 1— 3
Seneca	Tiffin	" 1— 3
Summit	Akron	" 1— 3
Wayne	Wooster	" 1— 3
Morrow	Mount Gilead	" 1— 3
Tuscarawas Valley	Masillon	" 1— 4
Morgan	McConnellsville	" 7— 9
Tuscarawas	N. Philadelphia	" 7— 9
Richland	Mansfield	" 7— 9
Williams	Bryan	" 7— 9
Delaware	Delaware	" 8—10
Greene	Xenia	" 8—10
Stark	Canton	" 8—10
Union	Marysville	" 8—10

INDIANA.

Morgan	Centerton	Sept. 2— 5
Sullivan	Carlisle	" 3— 5
Wabash	Wabash	Oct. 7— 9
Fulton	Rochester	" 10—11

ILLINOIS.

Henry	Cambridge	Sept. 3— 5
Winnebago	Rockford	" 16—19
Hillsborough	———	" 16—
Boone	Belvidere	" 23—25
Tazewell	Tremont	" 24—26
Randolph	Sparta	" 24—26
Jasper	Newton	Oct. 1— 3
Warren	Monmouth	" 7— 9
St. Clair	Belleville	" 7—10
Madison	Edwardsville	" 7—10
Greene	Carrollton	" 7—10

IOWA.

Harrison	Magnolia	Sept. 17—18

MICHIGAN.

Van Buren	Paw Paw	Sept. 22—24
Kalamazoo	Kalamazoo	" 24—26

KANSAS.

Lawrence	New Castle	Oct. 1— 3

CALIFORNIA.

San Joaquin	Stockton	Sept. 9—12

The Crop Reports and the Market—Weather, etc.

Our crop reports represent a very flourishing condition of the country, agriculturally speaking. The grain crop is decidedly in advance of last year's, though that was very great. Corn alone of the cereals falls behind. There are now very encouraging market prospects, indicating a certain demand for American breadstuffs. Naturally, this would tend to fix the price of wheat, at least in men's minds, but the state of the money market is such that it is impossible to name any figures which can be regarded as the probable price. The difference between gold and paper money is now so enormous, and there being no way to tell how long this state of things will last, that other values are very uncertain, and will continue to be until the relations of trade are less disturbed and a more settled state of the money market prevails.

THE WEATHER has been prevailingly favorable over the whole country, except North-eastern New-York and Northern New-England, where, up to our last advices, a severe drouth prevailed. Late in June (17th to 20th,) frosts of considerable severity visited Central New-York, some parts of Pennsylvania, and the West, doing much damage, but only in quite limited sections. The insect pests are making their accustomed havoc here and there. The cherries, grains, etc., suffered from the aphis—various caterpillars have been abundant, the chinch bug has done great damage in spots, and so has the midge, and in Colorado the grasshopper (or locust) has swept some districts, but no wide-spread desolation has occurred by drouth or wet, moth or rust.

GENERAL AVERAGE.—An average of each column is given at the foot of the table. Taking *prospects* alone exclusive of the fruits, we find an improvement over June; **10.8** being the average for July, against **10.3** in our last report. This is due to the wheat crop being successfully gathered. The general average of all crops, except fruits, including breadth, prospects, etc., is **11.8** and including fruits it is **12.8**, better than even the May report. The general average for the three months thus far reported; runs, May **12.6**, June **12.2**, July **12.8**.

Reports on Crops, July 10, 1862.

(*See General Remarks and Reports on Special Crops on page 232.*)

NOTE TO REPORTERS.—It is very important that a large number of the reports be mailed earlier than heretofore. It is useless to put two rows of figures, for we are obliged to average them afterward. It is also perplexing to have the words *fair, good, pretty good, poor,* etc., used instead of figures. After a crop is harvested, please estimate it, and mark figures as usual.

EXPLANATIONS TO THE READER. (Full details are given on the Blank Forms furnished to Reporters.)

The First Column gives the Counties from which the reports come. In many cases the territory reported upon extends over adjacent counties, and the figures apply to a larger territory than the county named, but sometimes to single townships only.

The Second Column gives the number of persons in each county or locality, the average of whose opinions are embraced in the single rows of figures, standing opposite in the same line. In several cases a whole County is represented by an officer of the Agricultural Society, who gives the summary of reports from assistants in each of the towns *m* indicates that a large but indefinite number of persons joined in making the report.

The Third Column gives the names of the persons who received and distributed blanks, and collected and forwarded returns.

☞ *In all the reports the numeral* **10** *is taken as the standard for comparison,* thus:

Column A—10 means that the weather for a month previous to the date of the report was about as good as the average for other years, that is for growing crops and for general farm operations. Figures above or below **10** indicate the comparative propitiousness or unfavorableness of the weather.

Columns—B—E—H—In these **10** indicates that the amount of surface growing is about the same as *last year*. Each figure (or unit) above **10** means a tenth more of surface, and each unit below **10**, means one-tenth less. Thus, **5** means one-half of average surface—**15** means one and a half—**20** means double, and so on.

Columns C—F—I—L—N—P—S—In these columns **10** means that the average surface sown or planted or growing is about the same as the average for five years past. Each unit above or below **10** stands for an increase or decrease of one-tenth in the surface.

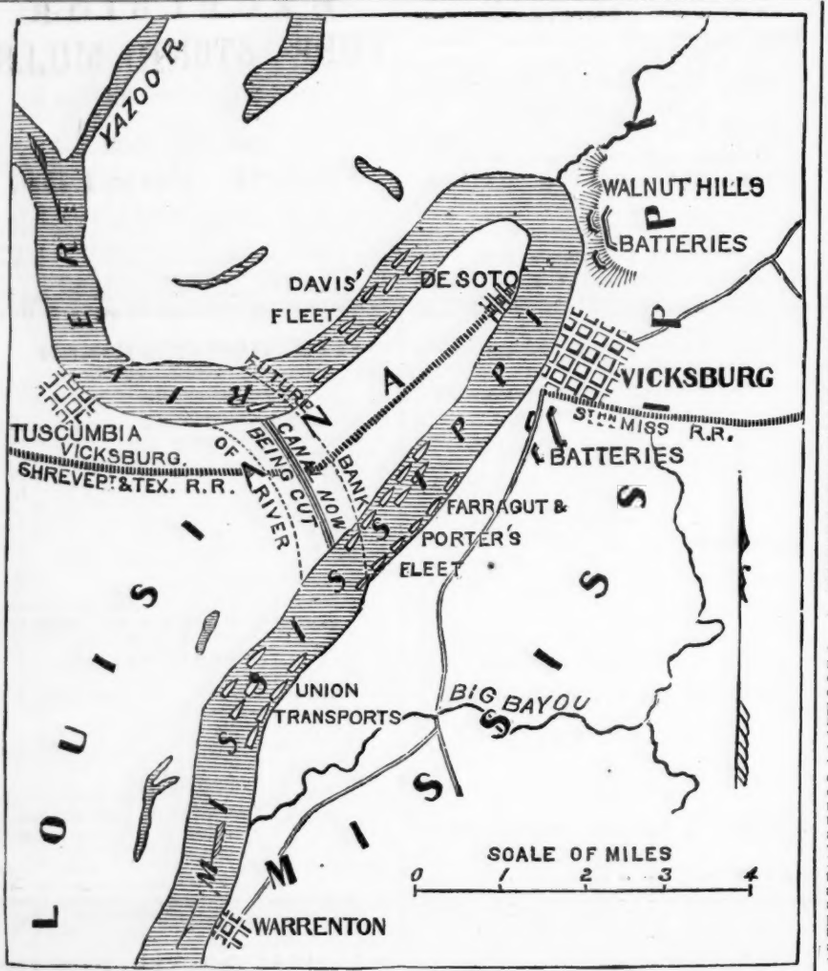
Columns D—G—K—M—O—R—T—U—V—In these columns **10** means that the *condition* and *prospect* on June 10th indicated an *average yield per acre*. Here also each unit above or below ten indicates the prospect of a yield a tenth above or a tenth below the average; thus, a half crop is indicated by **5**—a double crop by **20**. Some report fruit prospects at **100** to **300**, meaning that the promise is for ten to thirty times the average.

Blanks left in a column indicate that little or none of the crop is grown, or that it is too early to report upon it, or that the reporter could not estimate satisfactorily to himself. No reports have been received from some whose names are in the list, and who furnished reports last month.—For comments and reports on other crops see page 200.

Registered No.	*County and number of persons reporting from each.*		*Persons gathering and sending the reports.*	*Weather.*	*Winter Wheat: Surface vs. 1861.*	*Winter Wheat: Surface vs. av'ge.*	*Winter Wheat: Prospects at date.*	*Spring Wheat: Surface vs. 1861.*	*Spring Wheat: Surface vs. av'ge.*	*Spring Wheat: Prospects at date.*	*Corn: Surface vs. 1861.*	*Corn: Surface vs. av'ge.*	*Corn: Prospects at date.*	*Rye: Surface vs. 1861.*	*Rye: Surface vs. av'ge.*	*Rye: Prospects at date.*	*Oat: Surface vs. 1861.*	*Oat: Surface vs. av'ge.*	*Oat: Prospects at date.*	*Hay: Surface vs. av'ge.*	*Hay: Prospects at date.*	*Potatoes: Surface vs. av'ge.*	*Potatoes: Prospects at date.*	*Fruit: Apples.*	*Fruit: Peaches.*
				A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	R	S	T	U	V
	OHIO.																								
1	Washington	1	A. J. Hart	12	12	10	25	..	..	..	10	12	10	12	15	10	9	10	15	10	15	15	15	15	15
2	Auglaize	1	Samuel Craig	10	12	12	12	..	..	..	8	9	8	10	10	11	10	10	11	10	11	100	100		
3	Miami	1	Enoch Jones	10	11	12	12	..	..	..	10	11	9	10	10	10	8	9	10	10	10	9	12	25	
4	Trumbull	1	L. P. Andrews	9	10	10	30	20	45	8	12	15	10	2	15	20	20	10	10	11	10	20	15		
5	Huron	1	C. B. Simmons	9	11	12	13	11	13	12	9	10	8	10	10	10	11	10	11	10	9	13	16		
6	Crawford	1	D. Robertson, jr.	9	10	..	13	20	15	10	10	13	9	..	..	..	10	10	10	14	10	10	14	12	
7	Ashtabula,	8	J. W. Kennedy	20	15	20	18	10	15	12	12	15	15	10	15	20	20	10	9	10	20	20	15		
8	Licking	21	G. W. Penny	8	12	12	20	..	..	..	15	12	15	..	..	..	5	10	10	10	15	15	50		
9	Portage	13	H. G. Spooner	15	10	8	20	12	20	20	12	10	10	..	..	..	10	12	12	14	12	20	15		
10	Stark	1	Jacob Holl	9	12	10	12	20	30	10	10	10	8	..	..	..	9	10	11	12	11	9	8	15	
11	Paulding	11	J. N. Goodin	10	15	12	20	..	..	..	8	8	8	..	..	..	5	15	15	10	10	12	12	20	
12	Jackson	21	D. Mackley	10	16	12	15	20	..	..	12	15	12	10	12	7	12	10	15	12	15	20	30		
13	Richland	1	Joel Myers	10	12	12	14	20	20	10	13	13	10	10	10	8	10	10	11	10	10	8	50		
14	Fairfield	6	Thomas Cole	12	12	12	15	10	10	10	8	8	8	..	..	..	8	12	10	12	..	15	16	20	
15	Wyandot	1	J. D. Sears	8	10	13	12	15	20	10	10	12	8	10	12	8	12	14	13	12	10	12	20		
16	Portage	..	Homer Mills	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	Ashland	1	R. M. Close	10	12	14	15	14	15	12	10	12	8	10	10	7	10	10	11	10	10	12	20		
18	Wayne	29	J. A. Brown	15	12	11	20	..	..	12	10	11	10	..	9	10	14	10	15	10	12	6	5		
19	Coshocton	1	J. B. Burt	9	14	12	14	..	..	..	10	9	9	8	10	9	8	10	12	12	12	15	12		
20	Tuscarawas	1	A. O. Miksch	18	12	13	10	..	..	..	12	13	15	..	..	10	20	15	20	12	15	15	10		
21	Erie	5	G. A. Ransom	9	13	10	9	15	20	8	9	8	8	10	10	9	10	10	12	10	10	12	50		
22	Washington	*m*	C. F. Hayward	15	16	16	20	..	..	..	8	10	10	..	..	9	7	10	10	8	10	..	20		
23	Morgan	..	Wm. Milhous	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	Jefferson	1	John Edwards	10	12	12	15	30	20	5	10	10	8	5	10	10	10	12	10	10	10	5	5		
25	Portage	3	A. S. Plummer	18	11	10	19	99	99	11	10	9	12	16	15	10	12	9	12	12	9	9	90		
26	Morrow	..	G. W. Hiskett	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	Ashtabula	1	C. G. Calkins	10	10	10	9	12	15	5	10	10	7	10	10	7	8	10	9	8	10	15	20		
28	Belmont	..	Edd McCue	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	Belmont	11	Slater Brown	10	10	9	15	30	..	5	10	12	8	10	12	12	10	12	14	10	10	10	50		
30	Butler	..	Isaac Youmans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31	Greene	7	J. Clay Cox	13	12	15	20	..	..	..	16	13	9	8	14	7	8	8	10	15	13	50	60		
32	Licking & Fk'n	5	James Strang	10	12	11	15	12	20	5	11	10	11	12	16	8	7	10	13	10	11	15	30		
33	Richland	1	R. S. McFarland	10	12	12	15	..	..	..	13	14	15	10	14	9	15	10	15	10	12	8	20		
34	Fayette	1	D. M. Hays	20	10	12	20	..	..	..	12	15	12	12	10	15	8	10	12	20	10	20	30		
35	Butler	1	John M. Millikin	12	12	12	12	..	..	..	10	10	9	10	10	12	8	10	12	11	11	10	12		
37	Miami	11	J. K. Fretz	12	11	12	15	..	..	..	10	10	10	..	..	9	10	12	15	10	12	30	100		
38	Union	6	Dr. R. P. Munn	10	12	10	10	..	..	..	10	11	9	..	..	5	10	9	11	12	99	25	100		
39	Wood	1	M. H. Pennell	10	20	25	15	..	..	..	5	4	3	..	..	10	10	10	12	6	8	25	40		
40	Champaign	1	J. T. Zambro	10	12	15	13	8	6	10	10	10	12	10	12	10	13	10	15	12	15	100	200		
41	Pickaway	9	John Courtright	10	12	12	14	..	..	..	10	10	10	10	12	10	9	10	11	10	10	50	50		
42	Columbiana	4	D.W.C.Longshore	7	10	9	11	13	15	7	11	12	10	10	10	10	12	11	9	8	9	5	5		

Reg	County.	No.	Chief Reporters.	Wr.	Winter Wheat			Spring Wheat			Corn.			Rye.		Oat.		Hay		Potatoes		Fruit. Ap	Ph
					A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	R	S	T	U	V
	INDIANA.																							
51	Benton		D. Campbell																					
52	Jay	8	Peter Walter		8	11	12	13				11	16	8	5	8	10	18	12	20	9	8	12	999
53	Hendricks	6	A. Whitenack		20	11	16	14				10	11	13			10	12	12	11	16	14	10	
54	Knox	9	Joel Wampler		8	12	13	14				9	8	7	10	10	5	4	10	12	9	7	8	4
55	Randolph	16	C. G. Puckett		10	10	13	15				10	10	10			10	9	10	12	10	10	18	30
56	Henry	21	T. B. Redding		10	12	15	12				10	12	12			5	10	12	12	10	12	14	15
57	Henry	1	Jehu Allen		12	12	14	12				12	13	10			9	12	10	14	10	9	12	12
58	Sullivan	1	Murray Briggs		10	11	13					10	12	11	11		8	10	11	13			12	13
59	Hendricks	30	Jacob Bader		12	10	12	11				11	15	11			5	10	12	13	10	11	10	12
60	Marshall	1	Fred. Hoover		12	13	15	10				12	15	10			10	15	12	10	10	12	12	100
61	Ripley	1	E. Saltmarsh		12	11	12	12				10	10	9	10	10	8	6	10	12	10	11	9	4
62	Henry		P. P. Prifner																					
63	Vermillion	3	S. Grondyke		15	12	15	20				11	13	18	12	20	6	15	12	20			15	20
64	Hendricks	1	A. Furnas		10	10	11	15				10	10	12	10	12	8	5	10	13	8	11	15	10
65	Ripley		John Bennett																					
66	Newton	13	Elam G. Smith		7	15	20	12	10	15	10	15	14	7	13	12	20	12	10	15	12	14	10	6
67	Grant	10	Wm. Thomas, jr.		10	11	15	10				12	13	20			10	12	12	15	13	15	12	40
68	Switzerland	3	W. H. Stow		15	12	14	16				8	10	11	11		7	8	15	15	10	8	20	10
69	Green	6	Wm. Hovis		8	10	12	10				10	11	9	13	12	9	10	12	11	11	10	8	20
70	Adams		P. N. Collins																					
71	Adams	4	John McConnel		11	15	20	15				12	15	10	10	10	12	14	20	20	10	10	30	100
72	Ripley	3	John Bennett		11	12	13	12				9	10	11	12	10	8	10	13	11	10	11	13	15
73	Elkhart	13	D. S. Kershner		10	12	13	10	1	1	10	10	13	11	10	10	10	12	14	10	12	10	5	
74	Rush	1	S. M. Ball		11	9	10	12				11	9	10			8	9	12	13	10	13	15	15
75	La Porte		John Sutherland																					
76	Warwick	46	John J. Fleming		10	13	14	12				10	15	15				13	13	10	10	10	12	
77	Johnson	1	Hurricane F's As'		12	12	9	15				9	10	9	10	10	7	8	15	15	10	10	15	12
78	Jay	21	W. J. Hesser		10	12	14	13				10	12	11	7	11	10	12	12	20	10	11	12	50
79	Decatur	1	John W. Smith		10	12	10	15				10	11	8				8	15	10	10	10	10	
80	Vermillion		John Davis																					
81	Morgan		C. S. Hilbourn																					
82	Vigo		James M. Lyons		12	12	15	15				10	12	12	10	10	15	12	15	12	15	15	15	15
83	Randolph	18	L. M. Reeves			12	13	15				12	10	9	9	10	7	10	13	12	15	12	20	30
84	Hamilton	m	Andrew F. Evans		12	10		15				12	13	10			8	10	12	13	10	11	15	11
85	Marion	31	L. W. Ritter		10	12	10	12				10	12	9			10	8	10	15	11	10	8	11
86	Howard	1	Wm. S. Wooton			10	10	13				9	9	12	10	12	10	12			10	10	9	50
	ILLINOIS.																							
101	McDonough	1	Nelson Abbott		12	12	14	16	10	13	15	10	10	11	10	14	10	9	10	10	8		11	1
102	Coles		C. Boles																					
103	Saline	10	James M. Eaton		8			10				11	12	13		10		10	20	13	12	10	12	20
104	Jersey	1	J. M. Bacon		10	10	10	15				10	10	8			3	5	12	12		10	6	10
105	Jasper	1	Henry Griffing		12	15	15	15				10	13	8	12	12	8	10	10	15	10	10	10	8
106	Pike		Thos. Odiorne		10	12	10	7	8	5	8	9	8	10				10	10	10	10	10	10	10
107	Vermillion		H. C. Smith																					
108	Richland	1	H. A. Hunt		10	13	25	13				10	15				10	3	20	13	15	10	8	5
109	St. Clair	5	Edw. Flanagan		10	12	15					8	6	5			5	3	20	15	8	15	10	8
110	Marion		E. L. Merritt																					
111	DeKalb	1	C. W. Branch		10	10	10	12	12	12	6	7	9	6			10	10	10	15		12	10	
112	Macoupin	4	Harry Grundy		11	13	12	20	5	5	4	9	9	10			8	10	14	13				14
113	Cumberland	5	J. E. Mumford		40	12	18		30	10	8	7	10	8	20		8	2	20	50	8	10	7	5
114	Putn'm& Mar'll		C. C. Hoagland																					
115	Woodford	10	James Freeman		6	10	9	5	8	9	6	9	9	8	10	8	9	5	12	10	10	10	9	
116	Ogle	1	John Sharp		15	20	25	20	10	15	7	10	15	15	10	12	12	12	15	20		15	20	20
117	Vermillion	7	William Bowman		10	12	13	10				8	10	9	13	13	8	9	12	10	10	11	15	80
118	Kankakee		Democrat Office																					
119	Kendall		H. S. Hills																					
120	Crawford	1	Erastus Logan		15	15	20	25				10	12	15	30	20	10	12	15	15	12	10	5	5
121	Douglass		Caleb Bates																					
122	Mason		J. B. Wright																					
123	Douglass	1	I. J. Halsted		10	10	8	10				10	12	10	10	10	12	10	15	15	12	10	12	10
124	Warren	1	A. H. Tracy		12	11	10	15	11	11	12	9	9	9	8	10	10	11	11	12	10	11	10	
125	Mason		R. S. Lybarger																					
126	Marshall	1	W. H. Webbers		10					5	10	15	7	20	10	10	10	15	10	10	10	10	50	
127	Washington	1	J. A. Bent		12	15	20	12				8	9	10	15	12	20	15	15	15	12	10	15	10
128	DeKalb	1	N. F. Graves		7	11	10	8	11	11	8	13	11	7	8	5	9	10	7	5	10	7	5	
	WIS.																							
131	Sauk	9	Abijah Sweet		10	10	20	20	20	60	10	10	20	10			20	20	10	20	40	10	10	
132	Dodge		D. L. Bancroft																					
133	Fond du Lac	14	E. Reynolds		10				11	14	12	10	10	9			9	10	13	15	16	9	11	
134	Walworth	1	Geo. Cross		15				10		9	11	9	8			10	9	10	15	10	10	10	8
135	Green Lake	4	C. S. Whittier		10				11	10	10	10	9	8			9	10	12	10	10	10	7	
136	Jackson	1	C. T. Gansel		8	8	10	12	11	20	8	12	10	10			8	10		12	10	10		
137	Dane	4	I. A. Kierstead		12				10	12	8	10	11	8	10	13	10	12	14	15			10	
138	Trempleau	6	F. W. Newland		8	20	15	15	13	15	8	20	16	12			10	9	12	11	15	10	12	
139	Grant	5	J. A. Curtis		11	10	5	15	8	10	7	11	13	8	10	13	12	10	20	11	10	10	5	
140	Adams		S. W. Pierce																					
141	Badax		J. A. Somerly																					
142	Fond du Lac	5	Rev. A. A. Horton		10				10	11	9	9	10	7			10	8	10	11	11	9	12	
143	Monroe	11	G. M. Robinson		4	11	15	8	11	20	5	15	15	5	10	10	10	5	12	9	15	8	20	
144	Ray		O. D. Hawkins																					
145	Brown																							
146	La Fayette	1	J. C. March						3		5	9	7	5				9		9		5		
147	Grant	9	Thos. Pendleton		7				11	16	5	10	7	5			12	10	13	12	10	7	9	
148	Grant	1	S. D. Watkins		7	10	4	10	12	13	7	11	14	8			12	10	15	12	10	8	10	
149	Oconto	1	D. B. Newton		12	8	12	10	12	15	10	10	11	8			15	10	10	11	10	10		
171	Rock	1	H. D. Root		10	50	8	8	11	12	7	10	10	9	15	9	12	12	11	17	10	10		
	IOWA.																							
201	Jackson	3	H. Stephens		13				12	9	4	13	20	14			10	15	20	12	10	10		
202	Clinton	m	C. W. Hatch		10				12	15	6	15	20	12			15	15		15	14			
203	Cedar	1	J. A. Macy		9				10	28	7	11	20	9			15	11	10	15	8	9	11	
204	Fayette	1	H. C. Wood		10				11		10		8				9	10				10		
205	Ringgold		I. S. Beall																					
206	Delaware	m	J. L. McCreery		9	13	16	14	14	17	7	11	13	13			8	9	8	8			12	
207	Powshiek	1	Erastus Snow		10	12	30	15	9	50	9	18	30	8		15		10		12		9	12	
208	Marion	m	B. C. Bellamy		12	10	15	20	9	12	13	12	14	12	15	10	13	12	14	12		9		
209	Cedar	1	J. C. Alexander		10						5			8					15			15		
210	Madison	1	J. Carman		12	8	10	15	8	10	10	12	12	10	5	15	15	10	20	12	10	10		
211	Scott		T. F. C. Schmidt																					
212	Buchanan	1	H. C. Heminway									10				10			11		10			
213	Howard	1	C. A. Marshall		10				14	40	10	18	25	14			30	12			12	8		
214	Lucas	6	M. Moorhead		12				9	13	9	12	14	11			12	11			10	11	12	
215	Page	75	S. H. Kridelbaugh		9	11	20	10	11	99	9	10	70	10	10	10	40	16	9	11	50	11	10	10
216	Linn		F. H. Williams																					
217	Clayton	1	Wm. A. Penfield		9				12	20	10	12	20	12			15	10	20	15	20			
218	Madison		Josiah Carmeau																					
219	Scott	1	J. F. C. Schmidt		8				11	15	8	11	14	10			10	10			10	10	11	
220	Wayne	22	J. S. Whittaker		10	11	12	7	9	8	7	9	8	12	11	7	9	10	10	11	8	11	13	13
221	Delaware	1	J. C. Skinner		10	12	15	10	13	17	10	10	15	10	12	10	9	10	15	13	12	11	12	
222	Jones		Isaac Willard		9				11	12	7	11	12	11	10	10	9	11	12	15	9	8	12	9
223	Linn	1	H. C. Raymond																					
224	Dallas	1	H. E. Belden		10				9	12	8	11	13	10			13	10	12	13	11	10		
225	Howard	7	H. W. Partch		15				12	40	10	15	30	13			40	10			10	8		
	MINN.																							
251	Hennepin	m	Jonas H. Howe		12	11	20	15	11	18	10	15	10	12	3	10	15	10			10	12		
252	Fillmore	1	A. Gould		12	10		15	12	20	11	13	15	20	11	14	12	12	10	10	10	14		
253	Dodge	2	T. G. Patch		9				15	40	10	12	20	12			20	10	20	10	15	10		
254	Olmstead	2	R. H. Talbot		9				13	25	8	13	20	11	10	10	20	10		20	10	10		
255	Winona	20	S. R. Crittenden		15	13	20	20	11	15	13	12	9	11		9	11	15	20	12	11	12	12	13
256	Sibley	7	J. U. Green		15				15	35	25	18	30	15	8	30	20	20			25	20		
257	Nicollet		Wm. H. Sigler																					
258	Fillmore	5	A. Hitchcock		8					13	32	9	14	35	10			40	8			12	10	
259	Olmsted	4	A. Smith		10					11	15	10	12	14	12	10	10	13	12			12	10	
260	Wabasha		Wm. McLeoud																					
261	Blue Earth		James Miller																					
	MO.																							
300	Maries	1	W. I. Meeder		10	9	10	10	11	15	7	10	12	10	10	10	9	7	10	10	10	10	10	
301	Mississippi	1	Geo. Whitcomb		15								15				10	7		10		15	12	12
302	Franklin	4	Charles E. Ross		12			10					10					7		10		10	10	10
	KY.																							
326	Spencer	7	Milton McGrew		12	10	11	10				8	10	9	6	8	9	8	12	12	10	9	5	7
	MICH.																							
351	St. Joseph		O. W. Beall																					
352	Berrien	1	A. Bennett		10	10	12	9				12	10	13			8	8	10	8	10	10	4	5
354	Jackson	1	L. D. Watkins		10	10	14	12				9	8	10			12	15	10	15	8	10	18	12
355	Sanilac	16	C. Waterbury		5	20	30	9	5	8	5	10	12	10	10	10	15	7	15	6	10	8	10	
356	Calhoun	1	C. M. Keep		8	10	12	8				10	11	9			10	12	12	12	10	10	10	100
357	Clinton	1	John Walling		5	20	40	15	15	40	5	10	50	6	10	15	12	5	50	20	20	10	20	10
358	Lenawee	11	Rufus Baker		8	11	11	6				10	10	8			10	10	10	10	9	10	10	80
359	Ionia	4	D. T. Lawrence		10	13	15	10	9	10	10	11	12	10	8	11	12	9	16	9	12	10	7	10
361	Ionia	6	Charles Goodrich		12	13	16	8				10	12	11			12	10	13	9	10	10	15	40

Reg	County.	No.	Chief Reporters.	Wr.	Winter Wheat			Spring Wheat			Corn.			Rye.		Oat.		Hay		Potatoes		Fruit. Ap	Ph
					A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	R	S	T	U	V
	N. Y.																							
401	Chautauqua	1	John J. Phelps		10	10	12	12	10	10	10	11	12	10			10	10	10	8	10	10	15	25
402	Orleans	9	Peter Ferris		9	12	23	8	9	17	8	8	8	8			8	8	10	5	10	10	10	20
403	Lewis	5	John F. Bates		6				9	10	5						10	5	10	3	10	7	10	
404	Wyoming	13	Linus De Wolfe		10	15	8	15	12	10	12	10	10	6			10	10	10	8	10	8	20	50
405	St. Lawrence	21	J. S. Wallace		11				11	13	12	12	14	8	7	9	14	11	10	5	7	10	7	
406	Delaware	1	Levi Miles		10	7	10	8	8	10	10	10	12	10	13	8	9	10	13	8	12	10	5	
407	Niagara		J. Q. Adams																					
408	Suffolk	1	G. E. Woodruff		10	12	10	15	5	8	10	12	10	10	11	15	13	15	12	10	15	12	12	16
409	Fulton		Geo. W. Heaton																					
410	Niagara		A. E. Raymond																					
411	Oswego		D. Farling																					
412	Chenango		H. T. Richmond																					
413	Otsego		H. T. Richmond																					
414	Wayne	7	A. M. Richardson		8	10	13	10	15	20	8	10	10	6	1	15	10	8	10	5	8	10	20	50
415	Cayuga	1	W. Thompson		10	12	10	15	5	8	10	12	10	10	11	15	13	15	12	10	15	12	12	16
416	Chautauqua	1	H. A. Whitemore		10	10	10	15	13	15	15	15	10	12			20	15	10	10	12	15	20	20
417	Ontario	9	E. A. McKay		12	13	20	14	7	5	10	12	12	12	7	10	10	12	12	13	12	12	14	20
418	Saratoga	17	J. C. Rouse		12	11	12	8	12	12	10	12	12	13	10	8	12	9	10	8	13	13	15	
419	Onondaga	6	D. G. Newell		15	13	14	7	5	5	8	13		10	7	7	13	9	10	7	10	8	100	
420	Queens	m	Farmer's Club		10	10	11	9				10	10	10	13	13	10	12	12	11	9	10	15	
421	Essex		Jos. E. Smith																					
422	Suffolk	5	Watson Wilson		12	15	30	10	10	35	12	20	30	10	30	15	20	12	15	12	20	15	20	
423	Wyoming	5	D. T. Griffin		8	7	8	13	8	10	7			6			10	8	11	7	9	8	10	
424	Westchester		James Wood																					
425	Allegany	2	J. H. Weaver		11			9	8	12	7	8	10				10	9	11	8	10	9	20	
426	Broome		Cephas Benedict																					
427	Suffolk		John Henderson																					
428	Allegany		Daniel H. Cobb																					
429	Broome	14	C. H. Treadwell		10	10	10	7	11	12	8	13	13	9	10	7	10	7	12	9	10	10	80	60
430	Broome		R. Hogg, Sec. F.C.																					
431	Niagara	m	E. S. Holmes		11	13	20	10	20	23	8	6	8	8			8	9	10	7	5	8	12	15
432	Ulster	1	J. B. Brooks		11	15	12					8	9	8	12	13	12	10	11	12	10	10	15	20
433	Suffolk	2	Alonzo Mott		10	10	10	10				10		10			10	10	10	10		10		
	PENN.																							
451	Franklin		John F. Clayton																					
452	Franklin	11	Jas. H. Clayton		10	13	14					11	10	12	6	11	5	12	10	14	10	12	14	12
453	Bradford	10	E. B. Barns		12	13	12	10	8	9	10	11	10	4	10	10	8	8		6	10	10		
454	Snyder	1	F. Weirick		10	14		14				10		8			10	9		10	10	10	12	15
455	Franklin	1	O. S. Brown		10	10	15	20				10	10	10	5	15	8	8	10	20	10	15	15	15
456	Fayette	10	F. Oglevee		10	10	10	20	15	25	10	10	10	15	8	9	5	10	10	25	10	15	10	20
457	Dauphin	1	D. Brightbill		10	11	15	15				10	15	12	10	15	12	10	10	12	10	12	12	10
458	Franklin	1	J. Sharpe Nixon		10	11	12	20				9	10	15	10	20	7	15	10	20	12	20	20	15
459	Perry	6	Alex. Kauffman		8	13	20	15				10	11	14	5	10	12	15	10	15	12	15	15	12
460	Montgomery	8	J. C. Boorse		8	10	12	15				10	12	9	14	15	13	9	10		14	11	15	15
461	Lancaster	1	Cyrus Brinton		10	12	7					10	11	11			9	10	10	12	12	11	50	50
462	Lancaster	2	Jacob M. Seitz		8	10		8				10		12	10	10	8	9	12	14	10	12	50	50
463	Cambria	1	John Lloyd		10	10	12	12	10	10	10	10	10	10	10	10	10	10	11	11	10	10	999	500
464	Fulton	31	John Hoke		20	18	15	18				10	10	13	10	10	10	15	10	15	15	10	13	25	30
465	Delaware	4	Chas. G. Ogden		12	12	12	11				10	10	10			10	10		10	12	8	12	50	20
466	Franklin	5	O. H. Anderson		12	10	10	17				10	10	10	4	10	10	12	10	13	10	9	15	16
467	Blair		S. B. Replogle																					
468	Centre	1	D. G. Klein		10	10	10	12				10	10	8	10	12	10	10	10	10	10	10	40	100
469	Butler	1	Finley Balph					12			7		10			10		8	10		12	15	20	
470	Montgomery	5	A. Zimmerman		9	10	10	14				10	10	12	10	10	10	12	10	14			15	
471	Susquehanna	7	G. B. Slack		10	30	20	10	10	40	10	10	15	9	8	10	12	10	10	10	8	10	5	
472	Fayette	11	Jas. Robinson		10	15	10	20	5	10	7	10	10	7	6	5	8	8	10	10	10	10	3	10
473	Washington	1	John Post		12	10	10	20				12	10	10	5	10	15	12	10	18	15	12	30	20
474	Lancaster	6	H. Musselman		10	11	11	10				10	10	11	12	12	11	11	9	12	11	12	18	10
475	Columbia	m	A. P



OPERATIONS AT VICKSBURG.—The map shows the City of Vicksburg, Miss., on the eastern side of a large bend in the Mississippi, and the track of the canal now nearly completed, through which at the first rise, it is expected the waters will form a new and permanent channel, thus opening the navigation of the river.

Market Review, Prices, etc.

AMERICAN AGRICULTURIST OFFICE,
New-York, Friday Morning, July 18, 1862.

1. TRANSACTIONS AT THE NEW-YORK MARKETS.

RECEIPTS.	*Flour.*	*Wheat.*	*Corn.*	*Rye.*	*Barley.*	*Oats*
23 days *this* m'th	654,000	3,239,000	2,355,000	73,000	43,000	447,000
28 days *last* m'th	594,000	4,280,000	1,920,000	43,900	110,000	473,000

SALES.	*Flour.*	*Wheat.*	*Corn.*	*Rye.*	*Barley*
23 days *this* month,	642,000	4,726,000	3,052,000	132,000	6,000
28 days *last* month	697,700	5,337,000	2,612,000	185,500	31,000

2. *Comparison with same time last year.*

RECEIPTS.	*Flour.*	*Wheat.*	*Corn.*	*Rye.*	*Barley.*	*Oats.*
23 days 1862	654,000	3,239,000	2,355,000	73,000	43,900	447,000
26 days 1861	472,000	3,105,000	1,132,000	188,000	54,100	477,000

SALES.	*Flour.*	*Wheat.*	*Corn.*	*Rye.*	*Barley.*
23 days 1862	642,000	4,726,000	3,052,000	132,000	6,000
26 days 1861	399,000	4,475,000	1,861,000	153,500	——

3. *Exports from New-York, from Jan.* 1 *to July* 16.

	Flour	*Wheat.*	*Corn.*	*Rye.*	*Barley.*	*Oats.*
1862	1,532,583	8,045,042	6,612,533	894,988	22,088	22,023
1861	1,330,444	10,711,805	4,974,185	190,034	1,000	142,464
1860	606,975	2,121,725	1,763,725	100	8,280	98,764

4. RECEIPTS AT CHICAGO, JAN. 1, TO JULY 7.

	Flour.	*Wheat.*	*Corn.*	*Rye.*	*Barley.*	*Oats.*
1862	757,457	5,096,822	11,388,476	465,498	431,225	1,059,901
1861	613,165	5,232,484	9,483,364	227,427	306 387	511,962
1860	229,022	1,848,202	2,238,009	61,782	190,356	612,978

5. *Stock in store at Chicago, July* 8.

	Flour.	*Wheat.*	*Corn.*	*Oats.*
1862	35,650	1,106,964	3,050,066	——
1861	23,700	174,908	1,630,214	——

Heavy receipts and sales of Breadstuffs have been reported, during the past four weeks. The weather and market news from England have been encouraging to export buyers, who have purchased freely, in anticipation of an extensive deficiency in the yield of the harvest in the British Islands. The rapid advances in the value of Gold, and in the rate of Sterling Exchange, has also stimulated the demand from shippers, as it gave them unusual advantage in executing their orders. Toward the close of last week export movements were checked by the rise on freights, and a strike among the grain shovelers, who refused to work in connection with grain elevators. This difficulty is now partially adjusted, and many of the laborers have concluded to resume work. The home trade inquiry has been good. The annexed table of prices indicates a very general and gratifying improvement in the market value of the principal kinds of Breadstuffs. Flour has advanced 25@50 cents per bbl.; wheat, 10@15 cents; rye, 3 cents, and oats have risen 3@4 cents per bushel; corn has fluctuated considerably, but closes with an upward tendency....The rise in Cotton has been very rapid, amounting to 16 cents per lb., and sellers still have the advantage, the demand being largely in excess of the available supply. The receipts have averaged about 2,000 bales a week, while the weekly sales and re-sales have run up to an average of 6,500 bales....The supply of Provisions has been ample, and the market generally depressed, until within a few days, during which period hog products have been more sought after at advancing prices ...Hay has been quite plenty and in very moderate request at slightly reduced rates....Hops and Tobacco have been in fair demand and have been quoted very firm....Rice has been scarce and wanted; it closes higher....Wool was inactive early in the month; but, during the past ten days, has been quite freely dealt in and has increased in value. The market closes briskly. In the country there is less excitement, but high prices continue to be sustained. In fact, higher prices have been paid in the country than could be realized if forwarded here for sale. The bulk of the clip has been bought up.....The transactions in other agricultural products have been on a moderate scale. The table of prices show the changes and the present rates.

CURRENT WHOLESALE PRICES.

	June 20.	July 18.
FLOUR—Super to Extra State	$4 10 @ 4 75	$4 60 @ 5 25
Superfine Western	4 10 @ 4 20	4 55 @ 4 85
Extra Western	4 40 @ 6 75	5 25 @ 7 00
Fancy to Extra Genesee	4 80 @ 6 75	5 25 @ 7 00
Super. to Extra Southern	4 95 @ 6 75	5 20 @ 7 00
RYE FLOUR—Fine and Super.	2 70 @ 4 00	2 75 @ 4 10
CORN MEAL	2 90 @ 3 20	2 85 @ 3 25
WHEAT—Canada White	1 15 @ 1 25	1 30 @ 1 40
Western White	1 15 @ 1 35	1 30 @ 1 45
All kinds of Red	93 @ 1 20	1 02 @ 1 28
CORN—Yellow	55 @ 57	55 @ 58
White	58 @ 70	60 @ 70
Mixed	48 @ 54	48 @ 54
OATS—Western	43 @ 44½	45½@ 47
State	44½@ 45	47 @ 48
RYE	62 @ 75	74 @ 78
BARLEY	65 @ 75	None selling.
HAY, in bales, per 100 lbs	60 @ 75	50 @ 65
COTTON—Middlings, per lb	31 @ 31½	46 @ 47
RICE, per 100 lbs	6 50 @ 7 50	7 25 @ 7 50
HOPS, crop of 1861, per lb	14 @ 20	14 @ 20
FEATHERS, Live Geese, p. lb	38 @ 42	41 @ 43
SEED—Clover, per lb	7 @ 7½	7½@
Timothy, per bushel	1 75 @	None selling.
SUGAR—Brown, per lb	6½@ 8½	7½@ 10½
MOLASSES, New-Orleans, p. gl.	40 @ 45	45 @ 50
COFFEE, Rio, per lb	19 @ 21½	20 @ 22½
TOBACCO—Kentucky, &c, p. lb.	7½@ 18	8 @ 19
Seed Leaf, per lb	7 @ 25	7½@ 25
WOOL—Domestic fleece, p. lb.	40 @ 53	47 @ 56
Domestic, pulled, per lb	34 @ 44	36 @ 50
TALLOW, per lb	8½@ 9	10 @ 10½
OIL CAKE, per tun	28 00 @35 00	33 00 @38 00
PORK—Mess, per bbl	10 80 @11 00	11 00 @11 25
Prime, per bbl	8 62½@ 8 87½	8 75 @ 9 00
BEEF—Plain mess	11 25 @13 00	11 25 @13 00
LARD, in bbls., per lb	7½@ 8½	8 @ 9¼
BUTTER—Western, per lb	9 @ 16	9 @ 14
State, per lb	10 @ 18	10 @ 17
CHEESE	4 @ 7½	5 @ 8
Broom Corn—per lb	5 @ 7	5 @ 7
EGGS—Fresh, per dozen	9 @ 11	12 @ 12½
Western, per doz		10 @ 11
POULTRY—Fowls, per lb	7 @ 8	10 @ 11
Ducks, per pair	50 @ 60	38 @ 50
Geese, per pair	1 00 @ 1 25	1 00 @ 1 25
Turkeys, per lb	9 @ 10	11 @ 12
Dried Apples, per lb	5 @ 5¾	4½@ 5¾
Dried Raspberries, per lb	16 @ 17	14 @ 15
Dried Cherries, per lb		15 @ 16
POTATOES—NewJunes, p. bbl.		2 00 @
Dykemans, New, per bbl		2 25 @ 2 50
Buckeyes, per bbl		5 25 @
Bermuda—New, per bbl	5 25 @ 5 75	5 25 @ 5 75
ONIONS—New Bermud, p. lb.	2 @ 2½	2 @ 2½
TURNIPS—New White, p. bbl.	1 75 @ 3 00	1 00 @ 1 25
Rutabagas, per bbl		1 00 @
CHEERIES, per lb	7 @ 10	3 @ 8
GOOSEBERRIES, per bushel	1 00 @ 1 25	75 @ 1 50
GREEN PEAS, per barrel	2 25 @	1 25 @ 1 50
STRING BEANS, per bbl		1 50 @ 1 75
SUMMER SQUASHES, per bbl.		1 75 @
RASPBERRIES, p. ½ qt. basket		3½@ 4
CURRANTS, per lb		2 @ 3
HUCKLEBERRIES, per bushel		2 50 @ 2 75
BLACKBERRIES, per bushel		2 00 @
do. per qt. box		10 @ 12
APPLES, New Norfolk, p. bbl.		3 00 @

N. Y. Live Stock Markets.—THE CATTLE MARKETS have been fully supplied during the past month and there has been a slight decline in prices. Most of the stock now hails from Illinois, and is of fair quality, corn-fed last Winter and grazed this Summer on the rich prairies. For the first week (June 24) we had 4,427 bullocks all of which were sold at about the rates of the previous week, or an average of 8c. per lb. for the estimated weight of the dressed carcass. The following week there were 5,187 cattle, which was 300 more than could be sold even at a decline of ½c. per lb. Graziers bought several droves for feeding along the Hudson River and Harlem railroads. The first week in July showed 4,250, which, taking into account those left from the previous week, and the fact that butchers then bought more than they wanted, proved some 250 more than were needed. Prices a shade lower still, with a slow market. At the last market, July 15, present 3,550 beeves, which an active demand soon used up at an advance of ½c., and a few hundred more could have been sold. Prices for prime steers were 8¼c.@8½c. ℔ lb.; fair cattle, 7¾c.@8c.; poor stock, 7c., with a general average of 7¾c. for all kinds, the quality ranking only medium. Average weekly receipts, 4,354.

Veal Calves.—Receipts continue to fall off as the season advances, and the demand for veal is proportionally less. They are worth 3½c.@5¼c. per lb., live weight, very few bringing the latter price. Good calves sell at 4½c.@5c. per lb. The average receipts for the past four weeks amounts to 587, or near 200 less than last month.

Sheep and Lambs.—Receipts have been much larger than last month, the weekly average being 9,885, but as mutton is a favorite food during hot weather, the demand has exceeded the supply, at least for two weeks past. Good sheep of 90 lbs. to 110 lbs. weight, alive, are worth 4c., and if really fat, 4¼c. Medium and thin stock sells at 3¾c. down to 3¼c. Lambs bring 5¼c. @7c. per lb., approaching the price of sheep as they gain size and age.

Live Hogs.—Receipts are light just now, the number for the past week (5,871) being less than for any previous week since last September. The average receipts for the month are 8,690, against near 10,000 for the previous four weeks. Prices have ruled very low, reaching, July 8, the lowest point in ten years, with 9,560 on sale, following the large number of 12,900 the previous week. They fell to 3c. for prime corn-fed hogs. At the last market there was a marked advance in view of light arrivals, and fat corn hogs brought 3¾c., and still-fed hogs 3¼c. All sold.

The Weather has generally been warm, and during the last two weeks, rather dry. The crops are now looking well, and the hot weather has greatly changed the appearance of the corn, which was kept back by drouth, cold, and lastly too much rain. The berry crop is being diminished in some places for lack of rain, but on the whole there is every prospect of an abundant harvest of crops not gathered as will be seen by reference to our crop statistics on page 250. OUR DAILY NOTES, condensed, read:——*June* 21, 22, clear and fine—23, clear, with N. E. rain storm at night, which continued during the day and night of 24th—25, cloudy A. M., showers P. M., and at night—26, cloudy A. M., clear P. M.—27 to 29, clear, fine, hot, growing weather—30, light rain A. M., clear P. M.——*July* 1, clear, fine—2, N. E. rain storm P. M., and at night—3, cloudy A. M., clear P. M.—4 to 7, clear, hot days, the mercury reaching 90° in the shade—8, showers A. M., clear P. M.—9, 10, warm, light showers each day—11, 12, clear and fine, but cool—13 to 15, clear and hot, excellent corn weather, getting dry, with light shower at night of 15th—16, clear and hot, heavy thunder shower at night, soaking down thoroughly and doing abundance of good—17, 18, clear, and fine.

Rain Fall.—From the 15th of June, to the 15th of July, there were 4.38 inches of rain, which fell at 6 different times, besides 4 other slight showers which could not be measured.

Thermometer at 6 A. M., New-York.

[Observations carefully made upon a standard Thermometer (Fahrenheit.)—*r* indicates rain—*s*, snow.]

FEBRUARY.

1	.29*s*	7	38	13	31	19	30*r*
2	30	8	27	14	33	20	38
3	20*s*	9	26	15	23	21	25
4	24	10	18	16	21	22	33
5	24	11	20*s*	17	25*h*	23	33
6	28*r*	12	33	18	30	24	38*r*

25 17 26 20 27 30*s* 28 20 — Average27°

MARCH.

1	25°	8	33	15	35*r*	22	36*s*
2	25	9	32	16	33*r*	23	36
3	29*r*	10	38*r*	17	31	24	36
4	36	11	37	18	30	25	35
5	32*s*	12	36	19	28	26	30
6	28	13	33*r*	20	35*r*	27	32
7	25	14	34*r*	21	34*r*	28	37

29 29 30 32*r* 31 38*r* — Average33°

APRIL.

1	41	8	32*s*	15	43	22	48*r*
2	34	9	32*s*	16	49	23	46
3	41*r*	10	34	17	52	24	38
4	42	11	36	18	58*r*	25	39
5	39*r*	12	38	19	58	26	41
5	38	13	40	20	45*r*	27	41
7	32	14	43	21	42*r*	28	44*r*

29 47*r* 30 49 — Average42°

MAY.

1	46*r*	8	44	15	49	22	58
2	49*r*	9	49	16	55	23	62*r*
3	51*r*	10	59	17	58	24	54
4	49	11	46	18	58	25	50
5	50*r*	12	49	19	58*r*	26	51
6	47	13	54*r*	20	52	27	55*r*
7	48	14	56	21	56*r*	28	60*r*

29 52 30 57*r* 31 56 — Average53°

JUNE.

1	56*r*	8	56*r*	15	56*r*	22	58
2	60*r*	9	50	16	49	23	60
3	66	10	57*r*	17	54	24	64
4	63*r*	11	56	18	61*r*	25	62*r*
5	59	12	57*r*	19	61	26	58*r*
6	59	13	67*r*	20	64	27	58*r*
7	58*r*	14	67*r*	21	66	28	62*r*

29 71 30 66 — Average60°

JULY.

1	66	5	63	8	71*r*	11	62
2	59*r*	6	72	9	72	12	60
3	55*r*	7	77*r*	10	69*r*	13	65
4	60						

14 69 15 71*r* 16 71*r*

Advertisements.

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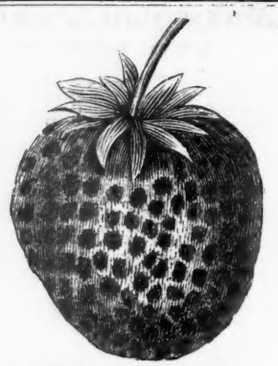

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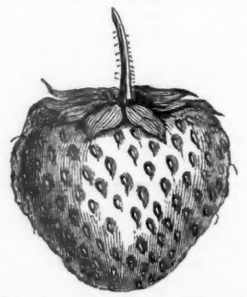

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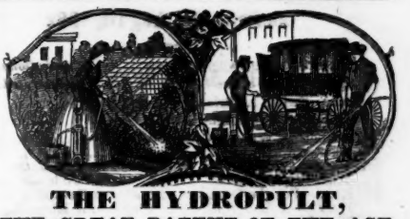

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